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## **The Pemphredoninae Wasps of "Biologiezentrum Linz" Collection in Linz, Austria (Hymenoptera, Apoidea, Crabronidae)**

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**A b s t r a c t :** The Pemphredoninae wasps of the following genera were examined: *Psen* LATREILLE 1796; *Mimesa* SHUCKARD 1837; *Mimumesa* MALLOCH 1933; *Psenulus* KOHL 1897; *Pemphredon* LATREILLE 1796; *Passaloecus* SHUCKARD 1837; *Polemistus* SAUSSURE 1892; *Spilomena* SHUCKARD 1838; *Ammoplanus* GIRAUD 1869; *Protostigmus* TURNER 1918; *Araucastigmus* FINNAMORE 1995; *Carinostigmus* TSUNEKI 1954; *Incastigmus* FINNAMORE 1995; *Llaqhastigmus* FINNAMORE 1995; *Stigmus* PANZER 1804; *Tzustigmus* FINNAMORE 1995.

All information on localities are given, however of common species only localities outside Central Europe are listed.

**K e y w o r d s :** Apoidea, Sphecidae, Crabronidae, Pemphredoninae

### **Introduction**

Last years I tried to identify nearly all Pemphredoninae of the Collection "Biologiezentrum Linz" in Austria. However I did not examin the genus *Diodontus* CURTIS 1834, because E. Budrys (Vilnius, Lithuania) is working on a revision of this genus. I will determine this genus, as soon as a key for the palearctic region is available.

Complete information including the localities and the dates of capture is listed. With widespread and commonly found species the exact localities and dates of capture are listed only if they were found outside Central Europe.

### **Material examined**

**Tribe: *P s e n i n i* A. COSTA 1858**

***P s e n* LATREILLE 1796**

***Psen affinis* GUSSAKOVSKIJ 1937**

**C h i n a :** 1♂, Yunnan prov., Cangshan mts. 2600-3100m, 25.38N, 100.09E, 5.-6.VI.1993, leg. Kuban.

***Psen ater* (OLIVIER 1792) (2 ♀♀, 1 ♂)**

R o m a n i a : 1 ♀, Restia, 2.VIII.1999, leg. Snizek; 1 ♀, Turda, VII.1976, leg. Deneš; 1 ♂, Brasov, 800m, 1994, leg. Szekely.

***Psen nepalensis* VAN LITH 1968**

N e p a l : 1 ♂, 1 km S Godaveri, 1700m, 27°35'N 85°23'E, 11.VII.1998, leg. G.Karki.

Very similar to female. Face with silvery hairs. Flagellomere comparatively short: flagellomeres 1-3 combined 2.6 times as long as scape; 6<sup>th</sup> flagellomere 1.5 times as long as wide. Flagellomeres 3-10 with narrowly elliptic tyloidea (on flagellomere 3 very small). I think this specimen could be the unknown male of *Psen nepalensis*.

***Psen rufoannulatus* CAMERON 1907**

C h i n a : 1 ♂, Yunnan prov., Ninglang env., 27.19N, 100.55E, 6.-10.VII.1992, leg. Becvar.

***Psen seminitidus* VAN LITH 1965**

C h i n a : 1 ♂, Yunnan prov., Heishui 35 km N Lijiang, 27.13N, 100.19E, 18.VI.-4.VII. 1993, leg. Becvar.

***Mimesa* SHUCKARD 1837**

***Mimesa bicolor* (JURINE 1807) (28 ♀♀, 27 ♂♂)**

K a z a k h s t a n : 1 ♂, Alma Ata 35 km zap. Aksaj, 16.VII.1981, leg. Kocourek; 2 ♂♂, Issik 3 km S, 22.-23.VI.1992, leg. Halada.

K i r g i z i y a : 2 ♂♂, Kirgiziya Mts. 1800m, Ala-Archa riv., Kashkasi, 25.VII.1999, leg. Gurko; 2 ♂♂, Kirgiziya Mts. 1650m, Ala-Archa riv., Kashka-Suu, VII.2000, leg. Gurko.

R u s s i a n F e d e r a t i o n - S : 1 ♂, Sakhalin, Tschekhova, 300m, 28.IV.1998, leg. Nestepob.

The remaining specimens come from Austria, Bulgaria, Czech Republic and Slovakia.

***Mimesa bruxellensis* BONDROIT 1934 (7 ♀♀, 8 ♂♂)**

(= *Psen rossicus* GUSSAKOVSKIJ 1937)

All this specimens come from Czech Republic und Slovakia.

***Mimesa caucasica* MAIDL 1914 (5 ♀♀, 86 ♂♂)**

K a z a k h s t a n - W : 1 ♂, Ryn-peskj, 20 km E Bisen, 25.V.2001, leg. Miatleuski; 1 ♂, Ryn-peskj, 12.km S Urda, 2001, leg. Miatleuski.

K i r g i z i y a : 2 ♀♀, Fergansky Mt. R., E-Urumbash riv., VI.2000, leg. Gurko; 1 ♂, Tchon-Aryk foothills, 2 km S Bishkak, 42°47'N 74°34'E, 30.VII.2000, leg. Zonstein; 3 ♂♂, Kirgizia Mts. 1800m, Ala-Archa riv., Kashkasi, 25.VII.1999, leg. Gurko; 4 ♂♂, Kirgizia Mts. 1650m, Ala-Archa riv., Kashka-Sun, VII.2000, leg. Gurko; 19 ♂♂, Tash-Arik, 11 km E Talas, 4.VII.1992, leg. Jirousek; 1 ♂, Taldi-Bulag, 90 km E Talas, 5.VII.1992, leg. Halada;

R u s s i a n F e d e r a t i o n : 1 ♂, Gruzia, Dschwari, 23.V.1978, leg. Kocourek.

T a d z h i k i s t a n : 1 ♀, 1 ♂, Pendzhikend, 20 km v Resen Pojom, 26.VI.1981, leg. Kocourek; 1 ♀, 53 ♂♂, Nurek (dam), 7.-10.VI.1990, leg. Halada.

T u r k m e n y a : 1 ♂, Aschabat 15. km N, 25.-31.V.1993, leg. Halada.

ad *M. caucasica*: variation: legs completely black.

S y r i a : 1 ♀, 30 km W Damascus, 19.VI.2000, leg. Halada.

***Mimesa chinensis* (GUSSAKOVSKIJ 1937)**

C h i n a : 1♂, Sichuan, Daliang Shan mts. pass Xichang-Meigu, Zhaojue vill. env., 12.-14.VI.1998, leg. Jindra et Tryzna.

***Mimesa crassipes* A. COSTA 1871 (35♀, 138♂)**

C r o a t i a : 2♀, Istrie, 10 km N Pula, 25.-27.VIII.1998, leg. Halada.

I t a l y : 1♂, 30 km N Ravenna, 8.VII.2000, leg. Halada; 1♂, Emilia Romagna, 60 km N Ravenna, 8.VII.2000, leg. Halada.

K a z a k h s t a n : 2♀, 3♂, Alma Ata, 35 km W Aksaj, 16.VII.1981, leg. Kocourek; 1♀, 2♂♂, Vanovka, 80 km E Djambul, 30.VI.1992, leg. Jirousek; 1♂, Taldi-Kurgan, 200 km NE Tcherkaskoe, 27.VI.1992, leg. Halada; 1♂, Georgievka, 75,6°E-48,2°N, 16.VI.1995, leg. Halada.

K i r g i z i y a : 1♀, 3♂♂, Kirgiziya Mts., Ala Archa riv., Kashka-Suu, 1650m, VII.2000, leg. Gurko; 1♂, Kirgiziya Mts., Ala-Atcha riv. Kashkasi, 1800m, 25.VII.1999, leg. Gurko; 2♂♂, Kirgiziya Mts. Tshon-Azyk, 900m, VI.1999, leg. Gurko; 1♂, Afleatum env., 41,6°N, 71,6°E, 1.-3.VI.1995, leg. Halada; 5♂♂, Frunze, 15 km S Cin-Arik, 8.VII.1981, leg. Kocourek.

R u s s i a n F e d e r a t i o n : 2♂♂, NW Kalmykia Godzhur env., VI.2001, leg. Miatlenski.

T u r k e y : 1♀, 1♂, 15 km E Malatya, 27.VI.2000, leg. Halada; 2♂♂, 25 km E Malatya Kopelsiz, 8.7.1997, leg. Halada; 1♂, 15 km W Refahye W of Erzican, 1600m, 7.VII.2000, leg. Halada; 1♂, Sandikli env., 7.VII.1992, leg. Deneš; 1♂, Sultan Daglari Yalvac env., leg. Jirousek;

U k r a i n a : 1♂, Zaporeli, 5.VII.1965, leg. Halada; 1♀, Crimea, Belogorst, 20.V.1997, leg. Gurko; 1♂, Crimea, Jalta, 8.X.1985, leg. Halada.

The remaining specimens come from Bulgaria, Croatia, Czech Republic, Hungary and Slovakia.

*M. crassipes* variation: all legs dark-brown

T u r k e y : 2♀, E Erzurum, 2000m, 6.VII.2000, leg. Halada; 1♀, Konya, Mt. Aydos/Eregli, 1600m, leg. Halada.

***Mimesa equestris* (FABRICIUS 1804) (41♀, 62♂)**

All specimens from Austria, Czech Republic, Finland and Slovakia.

***Mimesa fallax* F. MORAWITZ 1892 (14♀, 38♂)**

Seems to be a mountain species!

K a z a k h s t a n : 2♀, Alma Ata, 30 km W Aksaj, 16.VII.1981, leg. Kocourek; 5♂♂, Issik 3 km S, 22.-23.VI.1992, leg. Halada; 2♂♂, Fabritchny 40 km E Alma Ata, 23.VI.1992, leg. Jirousek.

K i r g i z i y a : 1♀, Tchujskaya Oblast, Kirgisisches Geb., N Tjoo-Ashun-Pass, 43°23'13"N 73°48'43"E GPS, 2400-2500m, 29.VII.1998, leg. H. & R. Rausch; 2♀, E-Terskei, Mt. R., Arashan, 2000m, 42°28'N 78°32'E, 23.VIII.1999, leg. Makogonova; 1♀, Dzhumgol-Too, E-Seok riv., 1900m, VII.2000, leg. Gurko; 1♀, 1♂, Alai Mt. R., Jkiziak, Kok-Suu riv. bass., VII.2000, leg. Gurko; 1♀, Kirgiziya Mts., Ala Atcha riv., Kashkasi, 1800m, 22.VI.1999, leg. Gurko; 1♀, Tash-Arik, 11 km E Talas, 4.VII.1992, leg. Halada; 1♀, Tchon-Aryk foothills 2 km S Bishkek, 42°47'N 74°34'E, 27.VI.2000, leg. Zonstein; 1♀, Karabalta gorge, Kirgiziya Mt. R., 29.VI.1997, leg. Ovchinnikov; 6♂♂, Kirgiziya Mt. R., Ala-Archa riv., Uzum-Bulat, V.2000, leg. Gurko; 3♂♂, Kirgiziya Mt. R., Malinovka 1650m, 10.V.2000, leg. Gurko; 6♂♂, Tash-Arik 11 km E Talas, 4.VII.1992, leg. Halada; 1♂, Kirgiziya Mts. Ala-Archa riv., Kashka-Suu, 1650m, VII.2000, leg. Gurko; 2♂♂, Taldi-Bulag, 90 km E Talas, 5.VII.1992, leg. Halada; 2♂♂, Tshatkaiski Mts., Yzun-Bunec, VII.1998, leg. Gurko; 1♂, Alai valley Izkeshtam, Nuza riv., VII.2000, leg. Gurko; 2♂♂, Tchu vall., 10 km NNE Telek, 550m, 43°10'N 74°03'E, 19.VI.2000, leg. Zonstein; 2♂♂, Alai Mt. R., Katta Karakol r., 2550m, 39°52'N 73°22'E, 12.VII.1999, leg. Makogonova; 1♂, Oshakaya Obl., Distr. Alajsky, Gultscha valley, SSW Sopol-Korgon, 39°55'41"N 73°27'19"E GPS, 2300m, 15.VII.1998, leg. H. & R. Rausch; 1♂, Oshakaya Obl., Distr. Dchon-Alajsky, Alai-Geb., Kok-Suu valley, 30°37'34"N 71°56'38"E GPS, 2700-2800m, 20.-21.VII.1998, leg. H. & R. Rausch.

T a d z h i k i s t a n : 1♂, Alajkij chrebet, Dzirgatal, 2000m, 9.VI.1990, leg. Halada; 1♂, W. Pamir Mts., 30 km N of Rushan, 3500 m (!), VII.2000, leg. Gurko.

U z b e k i s t a n : 1 ♀, Vil. Taskent, Tschatkal-Geb. am Berg Surekata, 41°24'08''N 69°51'05''E  
GPS, 1500-1700m, 15.-17.VI.1997, leg. H. & R. Rausch; 1 ♀, 2 ♂♂, Zeravshan Mt. R., Aman-  
Kutan-Pass, 39°18'N 66°54'E, 1700m, 8.VI.1997, leg. Zonstein; 1 ♀, Taschkent, 450m, 41°22'N  
69°19'E, 12.V.2000, leg. Makogonova.

***Mimesa grandii* MAIDL 1933 (14 ♀♀, 24 ♂♂)**

B o s n i a : 1 ♀, Makarska, 3.IV.1990, leg. Benes.

B u l g a r i a : 1 ♀, Sandanski, 26.-31.V.1967, leg. Kocourek; 2 ♀♀, 1 ♂, Zlate Piski, 18.-29.VI.1986,  
leg. Halada; 1 ♀, Trakia, Plovdiv, 20.VII.1996, leg. Zaykov; 1 ♂, Albena, 29.VI.1977, leg. Tkatchu;  
2 ♂♂, Ropotano, 11.VIII.1979, leg. Hoffer; 3 ♂♂, Akmtopol, 1.VIII.1978, leg. Hoffer; 1 ♂,  
Akmtopol, 6.VII.1979, leg. Hoffer; 1 ♂, Sozopol, 8.VII.1978, leg. Hoffer; 1 ♂, Sozopol,  
24.VII.1978, leg. Hoffer; 1 ♂, Sozopol, 30.VII.1979, leg. Hoffer; 2 ♂♂, Ropotamo, 20.VII.1979,  
leg. Hoffer; 1 ♂, Ropotamo, 24.VII.1978, leg. Hoffer.

I t a l y : 1 ♀, Lago di Garda, Torri, 15.IX.1991, leg. Deneš; 1 ♀, Puglia, Taranto env., 25.VIII.1997,  
leg. Halada.

M a k e d o n i j a : 2 ♀♀, Radovici, VI.1977, leg. Benes.

M o r o c c o : 4 ♀♀, 1 ♂, 40 km E Taroudant Aoulou, 17.V.1997, leg. Halada; 1 ♂, Taroudant,  
24.IV.1990, leg. Halada; 2 ♂♂, Casades d. Ouz, 12.V.1997, leg. Halada; 2 ♂♂, 30 km N Zagora,  
15.V.1997, leg. Halada; 1 ♂, Agadir env., 18.V.1997, leg. Halada; 1 ♂, Zagora env., 15.V.1997,  
leg. Proudek.

S l o v a k i a : 1 ♂, Somotor, 1.VII.1952, leg. Kocourek.

T u r k e y : 1 ♀, Zelve/Nevsehir, 1100m, 25.VIII.1991, leg. Halada.

***Mimesa gussakovskiji* (de BEAUMONT 1941) (2 ♀♀, 1 ♂)**

K a z a k h s t a n -W: 1 ♂, Ryn-peski, 12 km S Urda, 3.VI.2001, leg. Miatleuski; 1 ♀, 25 km W  
Ipomiset, V.2000, leg. Miatleuski; 1 ♀, Botku salt lake env., 4.VI.2001, leg. Miatleuski.

***Mimesa hissarica* (GUSSAKOVSKIJ 1935)**

K i r g i z i y a : 1 ♀, Kirgiziya Mts., Ala-Archa riv., Kashka-Suu, 1600m, VII.2000, leg. Gurko.

***Mimesa jacobsoni* (GUSSAKOVSKIJ 1937)**

K a z a k h s t a n : 1 ♂, 20 km SE Aksay env., 16.-19.VI.1992, leg. Deneš.

***Mimesa jacobsoni transiliensis* BUDRYS 1985**

K i r g i z i y a : 1 ♀, Dzhalal-Abadskaya, Distr. Dzhan-Y-Dzholsky, 1200m, 4 km S Arkyt, 41°45'N  
71°59'E, 28.-29.VI.1996, leg. Rausch.

***Mimesa lutaria* (FABRICIUS 1787) (26 ♀♀, 4 ♂♂)**

K a z a k h s t a n : 3 ♀♀, Alma Ata, 30 km W Aksaj, 16.VII.1981, leg. Kocourek.

K i r g i z i y a : 1 ♂, Ak-Suu riv. Tezkey Alatau Mt. Teplokljuchenka vill., VI.1999, leg. Gurko;  
4 ♀♀, Kirgiziya Mts. Ala-Archa riv., Kashka-Suu, 1650m, VII.2000, leg. Gurko; 2 ♀♀, Kirgiziya  
Mt. R. Ala-Archa riv., Ooru-Say, 1650m, VII.2000, leg. Gurko; 1 ♀, Kirgiziya Mts. Ala-Archa riv.,  
Kaskhasi, 1800m, 25.VII.1999, leg. Gurko; 1 ♀, Kirgiziya Mt. R. Alamedin riv., 1700m, VIII.2000,  
leg. Gurko; 1 ♀, Kirgiziya Mt. R. Ala-Archa riv., Uzum-Bulat, V.2000, leg. Gurko.

T u r k e y -E: 10 km S Ahlat, 24.VI.1997, leg. Halada.

The remaining specimens come from Austria, Czech Republic and Finland.

***Mimesa nasuta* BUDRYS 1985 (6 ♀♀, 5 ♂♂)**

K i r g i z i y a : 3 ♀♀, Tash-Arik, 11 km E Talas, 4.VII.1992, leg. Jirousek; 1 ♀, Kirgiziya Mt. Rg.,  
30 km E Osh, Taldyk riv., VII.1999, leg. Gurko; 1 ♀, E Terskei, Mt. R. Arashan, 2000m, 42°28'N  
78°32'E, 23.VIII.1999, leg. Makogonova.

**T u r k e y :** 1 ♀, Befahiye/Erzican, 2200m, 23.VIII.1991, leg. Halada; 3 ♂♂, Taskent/Konya, 1800m, 6.VIII.1991, leg. Halada; 1 ♂, Konya, Mt. Avdos/Eregli, 1600m, 7.VIII.1991, leg. Halada; 1 ♂, Seydischir Konya, 1800m, 4.VIII.1991, leg. Halada.

***Mimesa nigrita* EVERSMAAN 1849 (6 ♀♀, 14 ♂♂)**

**K a z a k h s t a n -W:** 1 ♀, 2 ♂♂, S Zhapak Saline, VI.2001, leg. Miatleuski.

**S y r i a -S:** 4 ♀♀, 8 ♂♂, 30 km S Suwayda, Dibbin, 15.-17.V.1996, leg. Halada; 1 ♀, 1 ♂, Anata, 50 km SE Suwayda, 20.-21.V.1996, leg. Halada.

**T u r k e y :** 2 ♂♂, Kahraman Maras 40 km SE, 10.VI.1998, leg. Halada; 1 ♂, 30 km NW Gaziantep, 2001, leg. Snizek.

***Mimesa punctipleuris* (GUSSAKOVSKIJ 1937)**

**K i r g i z i y a :** 1 ♀, 2 ♂♂, Kirgiziya Mts. Ala-Archa riv., Kashka-Suu, 1650m, VII. 2000, leg. Gurko.

***Mimesa sublaevis* (DE BEAUMONT 1954) (9 ♀♀, 13 ♂♂)**

**M o r o c c o :** 2 ♀♀, 2 ♂♂, 40 km E Taroudannt, Aoulouz, 17.V.1997, leg. Halada; 1 ♀, 1 ♂, Tagounite, 60 km S Zagora, 23.IV.1995, leg. Halada; 4 ♀♀, 8 ♂♂, 10 km N Mhamid, 21.-22.IV.1995, leg. Halada; 2 ♀♀, 5 km S Zagora, 24.-25.IV.1995, leg. Halada; 1 ♂, 10 km N Erfoud, 10.IV.1995, leg. Halada.

**S p a i n :** 1 ♂, Gran Canaria, Mascalomas-Dünen, 14.-18.IV.1973, leg. Wolf.

***Mimesa tenuis* OEHLKE 1965 (5 ♀♀, 9 ♂♂)**

This species is very similar to *Mimesa caucasica*, it may be a synonym!

**H u n g a r y :** 1 ♀, 1 ♂, Credny, 5.VIII.1985, leg. Karas.

**S l o v a k i a :** 1 ♀, Levice, VI.1960, leg. Kocourek; 2 ♀♀, 1 ♂, Soautor, VII.1962, leg. Kocourek; 1 ♀, 2 ♂♂, Somotor, VII.1952, leg. Kocourek; 3 ♂♂, Chotin, 30.VII.1962, leg. Padr; 1 ♂, Chotin, VII.1964, leg. Kocourek; 1 ♂, Chotin, I.VIII.1960, leg. Padr.

***Mimesa vindobonensis* MAIDL 1914 (5 ♂♂)**

**T u r k e y :** 4 ♂♂, E Erzurum, 2000m, 6.VII.2000, leg. Halada; 1 ♂, 50 km S Kars Pasli, 1.VII.1997, leg. Halada.

***Mimemesa* MALLOCH 1933**

***Mimemesa atratina* (F. MORAWITZ 1891) (39 ♀♀, 62 ♂♂)**

**K a z a k h s t a n :** 1 ♂, Alma Ata 15 km S Medeo, 13.VII.1981, leg. Kocourek.

**K i r g i z i y a :** 1 ♀, Kirgiziya Mts. Ala Archa riv. Kashka-Suu, 1650m, VII.2000, leg. Gurko; 1 ♀, Ak-Suu riv., Tezkey Alatan Mt., Tepokljuchenka vill., VI.1999, leg. Gurko.

**U k r a i n a :** 4 ♀♀, 2 ♂♂, Crimea, 12.VII.1999, leg. Gurko; 1 ♀, Crimea, Eupetoria, 1999, leg. Gurko.

The remaining specimens come from Czech Republic, Estonskaya and Slovakia.

***Mimemesa beaumonti* (VAN LITH 1949) (6 ♀♀, 3 ♂♂)**

**C z e c h R e p u b l i c :** 4 ♀♀, 1 ♂, Majdalena, I.VI.1991, leg. Deneš; 1 ♀, Moravia mer. Cejc, VII.1965, leg. Kocourek; 1 ♀, coll. Kocourek.

**S l o v a k i a :** 1 ♂, Kamenica, VIII.1964, leg. Kocourek; 1 ♂, Kamenica n/Hr., 11.VII.1964, leg. Kocourek.

***Mimumesa dahlbomi* (WESMAEL 1852) (17 ♀♀, 35 ♂♂)**

Kirgizija: 1 ♂, Arslanbad, 72.9°-41.3°, 12.-13.VI.1995, leg. Halada.

Romania: 1 ♂, Bihorului Mts. Rosina, VIII.1999, leg. Snizek.

Ukraine: 1 ♂, Crimea, Simpheropol, 14.VII.1999, leg. Gurko.

The remaining specimens come from Austria, Bulgaria, Czech Republic, Slovenija, Slovakia and Switzerland.

***Mimumesa littoralis* (BONDROIT 1934) (15 ♀♀, 13 ♂♂)**

Kazakhstan: 2 ♀♀, 3 ♂♂, River Ili, Aidarli, 14.VI.1992, leg. Deneš; 1 ♂, 20 km SE Aksay env. 16.-19.VI.1992, leg. Deneš; 1 ♀, Matai dessert, 78.6°-46°, 23.-25.VI.1995, leg. Halada.

Kirgizija: 1 ♂, Kizil-kiya, 40.2°N, 72.1°E, 15.V.1994, leg. Deneš.

Russian Federation: 1 ♀, Tuvinskaja, 10 km NE Erzín, 1.VI.1994, leg. Kletecka.

The remaining specimens come from Bulgaria, Czech Republic and Slovakia.

***Mimumesa unicolor* (VANDER LINDEN 1829) (118 ♀♀, 185 ♂♂)**

Estonskaya: 1 ♀, Tallin, 20.VII.1982, leg. Eiza.

Greece: 1 ♀, 9 ♂♂, Epeiros, 20 km N Preveza, 29.VIII.1997, leg. Halada.

Iraq: 1 ♂, Bagdad Sci. Res., Cent.-Garden, 11.IV.1988, leg. Olejniczek.

Italy: 1 ♀, Bibione, 10.VI.1996, leg. Deneš; 3 ♂♂, Emilia Romagna, 60 km N Ravenna, 8.VII.2000, leg. Halada.

Kazakhstan: 1 ♀, 20 km SE Aksay env., 16.-19.VI.1992, leg. Deneš; 1 ♀, Alma Ata, 15 km S Madec, 13.VII.1981, leg. Kocourek; 1 ♀, Koktal-Garden, 15.VI.1992, leg. Deneš; 3 ♂♂, 10 km E Djambul, 31.V.1994, leg. Halada; 1 ♂, Alma Ata, 1.VI.1994, leg. Halada; 1 ♂, Issik 3 km S, 22.-23.VI.1992, leg. Deneš; 1 ♀, Talas Mt. R., 3 km W Dzhabagly, 42°26'N 69°5'E, 5.VIII.2000, leg. Makogonova.

Kirgizija: 2 ♀♀, 1 ♂, Ala-Buka, 71.2°-41.5°, 6.VI.1995, leg. Halada; 2 ♀♀, 1 ♂, 10 km S San-Tzelek, 72°-42°, 5.VI.1995, leg. Mucka; 1 ♂, Talasskaya, NW-Teil des Talasskiy Alatan, SE Amanbaevo, 40 km SW Kirowskoye, 42°25'N 71°13'E, 1750m, 13.VI.1996, leg. Rausch; 1 ♂, Dzhalai-Abadskaya, Distr. Chatkal, WSW Ala Buka, Ostrand von Kizyl-Tokoj, 41°23'N 71°21'E, 1200m, 30.VI.1996, leg. Rausch; 3 ♂♂, Afleatun env., 71.6°-41.6°, 1.-3.VI.1995, leg. Halada; 1 ♂, Kizil-kiya, 40.2°N 72.1°E, 15.V.1994, leg. Halada; 3 ♂♂, Kirgiziya Mts., 1800m, Ala-Archa riv., Kashkasi, 25.VII.1999, leg. Gurko; 2 ♀♀, Bishek reg., Malinovka, 1500m, VI.2000, leg. Gurko; 1 ♀, Kirgiziya Mt. R., Ala-Archa riv., Üzum-Bulat, V.2000, leg. Gurko; 2 ♂♂, Kirgiziya Mts., Ala-Archa riv., Kashka-Suu, 1650m, VII.2000, leg. Gurko; 1 ♂, Kirgiziya Mt. Rg., 1650m, 10.V.2000, leg. Gurko.

Turkey: 1 ♀, Eregli, 13.VII.1987, leg. Halada; 2 ♂♂, Acigöl, Cardac env., 7.VII.1993, leg. Deneš; 1 ♂, Konya, Mt. Aydos/Eregli, 1600m, 7.VIII.1991, leg. Halada; 1 ♂, Saraykent env., 70 km E Yozgat, 1300m, 12.VI.2001, leg. Deneš.

Turkmenija: 1 ♀, Sandikatzi env., 3.-13.V.1993, leg. Halada; 2 ♂♂, Kopet-Dag, Geok-Tepe 15 km S, 2.V.1993, leg. Halada.

Ukraine: 1 ♀, Rovne, 14.VII.1985, leg. Halada.

Uzbekistan: Aktas, 41.2°N 69.4°E, 70 km NE Taschkent, 27.V.1994, leg. Halada.

The remaining specimens come from Austria, Bulgaria, Czech Republic, Slovakia, Slovenija and Romania.

***Psenulus* KOHL 1897*****Psenulus annamensis* VAN LITH 1972**

Laos - C: 1 ♀, Boikhamsai prov., Kaew Nua Pass, 18°22'N 105°09'E, 600m, XI.2000, leg. Jendek.

***Psenuus anomoneurae* (YASUMATSU 1938)**

(= *P. mandibularis* TSUNEMI 1959)

K o r e a - N : 1♂, Mychyang Mts., Hyangean, 650m, 28.V.-2.VI.1986, leg. Spldan.

***Psenuus capensis* BRAUNS 1899 (2♀, 14♂)**

B e n i n ( A f r i c a - S E ) : 2♀, 7♂, Zangnanado riv. Ouene, 15.IV.2000, leg. Halada.

K e n y a - m e r . : Voi (Tsavo), 8.-18.XI.1996, leg. Snizek.

T a n z a n i a - b o r . : 3♂, Mombo or., 9.-11.I.1996, leg. Snizek.

T a n z a n i a - o r . c e n t r . : 1♂, Nikuni, 17.-20.XII.1993, leg. Snizek.

T a n z a n i a - o r . : 1♂, Utete-Rufiji, Kindwitvi, 10.-14.XII.1993, leg. Snizek.

Z i m b a b w e - E : 1♂, Mutare Bvumba, 21.-24.XII.1996, leg. Snizek.

***Psenuus carinifrons malayanus* VAN LITH 1969 (2♀, 10♂)**

B o r n e o : 1♂, Sabah W, 50 km S Tomani, 4.V.1999, leg. Srmk.

M a l a y s i a - W : 2♀, 6♂, Ipoh, 5 km E Tanjong, Rambutan, 3.-15.IV.2000, leg. Snizek.

M a l a y s i a : 1♂, Perak, Gerik env., 26.-28.II.2000, leg. Deneš; 2♂, Bukit Larut, 23.-25.II.2000, leg. Deneš.

***Psenuus concolor* (DAHLBOM 1843) (40♀, 42♂)**

All specimens come from Czech Republic and Slovakia.

***Psenuus corporali* VAN LITH 1962**

M a l a y s i a - W : 2♀, Ipoh, 5 km E Tanjong, Rambutan, 3.-15.IV.2000, leg. Snizek.

***Psenuus crabroniformis* (SMITH 1857) (4♀, 2♂)**

L a o s - S : 1♂, Ban Itou env., 10.-18.IV.1999, leg. Sausa; 1♂, Ban Houaykong, 18.-30.IV.1999, leg. Sausa.

L a o s - C e n t r . : 2♀, Khammouan prov., Ban Khoun Ngeun, 18°07'N 104°29', 250m, XI.2000, leg. Jendek; 1♀, Khammouan prov., Naka, 500-600m, 17°43'N 105°09'E, VI.2001, leg. Jendek.

M a l a y s i a - W : 1♀, Ipoh, 5 km E Tanjong, Rambutan, 3.-15.IV.2000, leg. Snizek.

***Psenuus decipiens* VAN LITH 1976**

L a o s - S : 1♂, Ban Itou env., 10.-18.IV.1999, leg. Sausa.

***Psenuus diversus* VAN LITH 1962**

L a o s - S : 1♀, Ban Iton env., 10.-18.IV.1999, leg. Sausa.

***Psenuus erraticus* (SMITH 1860) (1♀, 2♂)**

L a o s - S : 1♀, Ban Itou env. 10.-18.IV.1999, leg. Sausa.

L a o s - S : 1♂, Ban Itou env., 10.-18.IV.1999, leg. Sausa; Clypeus of this male as in *P. erraticus basilanensis*, scutum without transverse rugae. Antennal segments 4-9 with linear tyloidea.

L a o s - S : 1♂, Ban Houaykong, 18.-30.IV.1999, leg. Sausa; Clypeus of this male tubercular, scutum distinctly transversely rugose. Antennal segments 4-8 with ovale distinct tyloidea.

***Psenuus esuchus* (ROHWER 1923)**

B o r n e o : 1♂, Sidas, 8.VI.1960.

***Psenulus fulvicornis* (SCHENCK 1857) (16 ♀; det. Schmid-Egger 2002)**

**Algeria** : 1 ♀, Djanet, 27.X.1975, leg. Hoffer.

**Bulgaria** : 1 ♀, Sandanski, 1.-8.VI.1967, leg. Kocourek; 1 ♀, Slndef Brjag, VI.1972, leg. Kocourek; 1 ♀, Sandanski, V.1967, leg. Kocourek; 1 ♀, Vlahi, 14.VIII.1993, leg. Halada; 1 ♀, Primorsko, 25.VII.1979, leg. Hoffer; 1 ♀, Ropotamo, 26.VI.1966, leg. Hoffer; 1 ♀, Sandanski, 14.VIII.1993, leg. Halada; 1 ♀, st. planina, Beronovo, 18.VIII.1996, leg. Zaykov.

**Croatia** : 1 ♀, Island Uglian (Kali), 18.VII.1966, leg. Hoffer.

**Greece** : 1 ♀, 1.VI.1979, leg. Hladil.

**Syria** - W: 1 ♀, 50 km W Homs, 12.V.1996, leg. Halada.

**Turkey** : 1 ♀, 100 km N Adana Feke, 12.VI.1998, leg. Halada; 1 ♀, Halfeti env., 3.-5.V.1994, leg. Halada; 1 ♀, Anatolien, Prov. Aydin, Nazilli-Beydag, 38.01°N 28.18°E, 650m, 24.V.1981, leg. Rausch; 1 ♀, 30 km N Kutahya Porsuk Bbraji, 15.VI.1997, leg. Halada, det. Dollfuss.

***Psenulus fuscipennis* (DAHLBOM 1843) (170 ♀ ♀, 38 ♂ ♂)**

**Ukraine** : 9 ♀ ♀, Crimea, Simpheropol, 1997-1999, leg. Gurko; 3 ♀ ♀, Eupatoria, 1.VIII.1999, leg. Gurko.

**Russian Federation** : 5 ♀ ♀, Caucasus centr., Svanetia Mestia, 1600-2000m, 17.-30.VI.1989, leg. Deneš; 2 ♀ ♀, 1 ♂, Primorsky, 40 km E Ussuriysk, 13.VI.1993, leg. Sidorenko.

The remaining specimens come from Bulgaria, Czech Republic, Finland, Romania, Slovakia, Slovenija and Switzerland.

***Psenulus interstitialis pseudolineatus* VAN LITH 1962 (2 ♂ ♂)**

**Laos** - C e n t r . : 1 ♂, Khammouan prov., Bau Khoun Ngeun, 18°07'N 104°29'E, 250m, XI.2000, leg. Jendek; 1 ♂, Khammouan prov., Nakai, 500-800m, 17°43'N 105°09'E, VI.2001, leg. Jendek.

***Psenulus laevigatus* (SCHENCK 1857) (25 ♀ ♀, 6 ♂ ♂)**

All specimens come from Bulgaria, Czech Republic and Slovakia.

***Psenulus laevis* GUSSAKOVSKIJ 1930 (236 ♀ ♀, 101 ♂ ♂)**

**Kirgiziya** : 178 ♀ ♀, Kizil-kiya, 40.2°N 72.1°E, 15.V.1994, leg. Halada; 6 ♀ ♀, 4 ♂ ♂, 20 km N Aravan, 40.3°N 72.5°E, 17.V.1994, leg. Halada; 3 ♀ ♀, Afleatun env., 41.6°N 71.6°E, 1.-3.VI.1995, leg. Mucka & Halada; 1 ♀, 1 ♂, Arslanbad, 41.3°N 72.9°E, 12.-13.VI.1995, leg. Halada; 1 ♀, 2 ♂ ♂, Chamanli-Sai, 41.2°N 71.8°E, 30.V.1995, leg. Mucka; 1 ♀, 10 km Sari-Tzelek, 42°N 72°E, 5.VI.1995, leg. Halada; 1 ♀, Alai Mts., Kyzyl-Kurgan, VII.1998, leg. Gurko; 1 ♂, Terek-Sai, 41.5°N 71.1°E 7.VI.1995, leg. Mucka; 1 ♂, 20 km S Eski-Nookat, 40.1°N 73.0°E, 17.V.1994, leg. Deneš; 3 ♂ ♂, Tash-Arik, 11 km E Talas, 4.VII.1992, leg. Jirousek; 1 ♂, Alai Mts., 2200-2300m, 10.-20.VIII.1999, leg. Gurko; 2 ♀ ♀, Ferghana Mt. R., Ak-Terek, 1700m, 41°17'N 72°49'E, 22.VII.2000, leg. Mekagonova; 1 ♀, Osh area, 25 km N Osh, Aravan, VI.2000, leg. Gurko; 1 ♂, 1.5 km E Dzhabal-Abad, 850m, 40°55.5'N 73°02'E, 20.VII.2000, leg. Zonstein.

**Tadzhikistan** : 3 ♀ ♀, 2 ♂ ♂, Vachs, 5.VI.1990, leg. Halada; 1 ♀, Darvazskij chrebet, Tavildara, 1800-2800m, 13.VI.1990, leg. Halada; 1 ♀, Alajskij chrebet, Dzirgatal, 9.VI.1990, leg. Halada.

**Turkmenija** : 1 ♀, 1 ♂, Kugit Anglau mont., Koiten, 8.VI.1993, leg. Deneš; 1 ♂, Farab, 29.IV.1991, leg. Halada; 1 ♂, Aschatat, 40 km W Firyuza, 6.VI.1993, leg. Halada.

**Uzbekistan** : 27 ♀ ♀, 33 ♂ ♂, Aktas, 70 km NE Tachkent, 41.2°N 69.4°E, 27.V.1994, leg. Halada; 3 ♀ ♀, 1 ♂, Czirczik, 41.1°N 69.1°E, 28.V.1994, leg. Halada; 3 ♀ ♀, 1 ♂, Papngan, 20 km NW Kokand, 41.2°N 70.6°E, 12.V.1994, leg. Halada; 2 ♀ ♀, 5 km W Djizak, 39.9°N 67.5°E, 23.V.1994, leg. Halada; 1 ♀, 8 ♂ ♂, Samarkand env., 12.-21.V.1994, leg. Halada; 3 ♂ ♂, Akcza, 20 km SW Angren, 41.1°N 70.0°E, 7.V.1994, leg. Halada; 3 ♂ ♂, Chiva-Chavar, 1.V.1979, leg. Kocourek; 2 ♂ ♂, Yangikichlak, 100 km NW Djizak, 40.3°N 66.9°E, 25.V.1994, leg. Halada; 1 ♂, Machtali, 120 km W Tashkent, 2.V.1989, leg. Halada.

ad *P. laevis* variation: flagellomeres of the following males completely black.



- Kirgiziya**: 8♂♂, Arslanbad, 41.3°N 72.9°E, 12.-13.VI.1995, leg. Mucka; 3♂♂, Afleatum env., 41.6°N 71.6°E, 1.-3.VI.1995, leg. Mucka; 3♂♂, lake Sari-Tzelek, 2000m, 42.1°N 72°E, 4.VI.1995, leg. Halada; 1♂, 10 km S Sari-Tzelek, 42°N 72°E, 5.VI.1995, leg. Halada; 1♂, Terek-Sai, 41.5°N 71.1°E, 7.VI.1995, leg. Mucka; 1♂, Dzhalal-Abadskaya Obl., Tschatkal-Tal, NW Tschakmah-Suu, 41°59'17''N 71°26'44''E GPS, 2200m, 8.-9.VII.1998, leg. Rausch; 1♂, Talasskaya Obl., Talas Alatan, Fluss Chichkan, 42°07'N 72°48'E, 1600-1800m, 31.V.-1.VI.1995, leg. Rausch; 1♂, 1.5 km E Dzhabal-Abad, 850m, 40°55.5'N 73°02' E, 20.VII.2000, leg. Zonstein; 1♂, Ferghana Mt. R., Ak-Terek, 1750m, 41°17'N 72°49'E, 22.VII.2000, leg. Makogonova; 1♂, Ferghan Mt. R., Alash-Too Mts., Alash forest, VIII.2000, leg. Gurko; 1♂, Kirgizija Mts., Ala-Archa riv., Kashka-Suu, 1650m, VII.2000, leg. Gurko.
- Tadzhikistan**: 1♂, Alajskij chrebet, Dzrgatal, 2000m, 9.VI.1990, leg. Halada.
- Uzbekistan**: 2♂♂, Kara-khum des/Chiva env., 1.VI.1980, leg. Hladil; 1♂, W-Zeravshan Mts., Dzhindydia valley, 39°12'N 67°16'E, 3.VII.1999, leg. Zonstein; 4♂♂, Fergana env.(30 km), Kadamzaj, 21.-22.V.1980, leg. Padr.

***Psenulus latiannulatus latiannulatus* (CAMERON 1910)**

- Central African Republic**: 1♂, Kembe, 4.29°N 21.53°E, 10.VII.1985, leg. Dollfuss.

***Psenulus lubricus* (PÉREZ 1905)**

- China**: 1♀, Yunnan prov., Dali, 28.V.-6.VI.1994, leg. Kucera; 1♂, Yunnan prov., Yulongshan mts., 2900-3500m, Baishui, 27°08'N 100°14'E, 7.-12.VII.1909, leg. Kucera.

***Psenulus macrodentatus* VAN LITH 1962**

- Laos - south**: 1♀, Ban Itou env., 10.-14.IV.1999, leg. Sausa.

***Psenulus meridionalis* DE BEAUMONT 1937 (14♀♀, 26♂♂)**

- Bulgaria**: 1♀, Slindov Brjag, 2.VIII.1968, leg. Kocourek; 1♀, Ropatamo, VIII.1978, leg. Hoffer; 1♀, Trakia, Trud, 1.IX.1997, leg. Zaykov; 1♀, 1♂, Trakia, Voivodino, 5.IX.1997, leg. Zaykov; 1♂, Sozopol, VII.1978, leg. Hoffer; 2♂♂, Slincev Brjag, 27.VII.1968, leg. Kocourek; 1♂, Slincev Brjag, 10.VI.1972, leg. Kocourek; 1♂, Stancev Brjag, VI.1966, leg. Pospisil; 2♀♀, 1♂, Sandanski, 1.-8.VI.1967, leg. Kocourek; 1♂, Slincev Brjag, 2.VIII.1968, leg. Kocourek.
- Greece**: 2♀♀, 1♂, Pelopones, 40 km S Argos P. Astros, 4.VII.1996, leg. Halada.
- Iran - centr.**: 2♂♂, Pasagrad env., 8.V.1999, leg. Deneš.
- Italy**: 1♀, Basilicata, 25 km W Lauria, 4.-5.VIII.1999, leg. Halada.
- Jordan**: 1♂, Zarga-Maln, 7.V.1995, leg. Deneš; 1♀, Pella, 4.V.1995, leg. Deneš; 1♂, N Shuna env., 29.-30.IV.1996, leg. Halada.
- Slovakia**: 1♀, Sturovo, VI.1965, leg. Kocourek.
- Serbia**: 1♂, Tcherma Gora, Ulcimi, 21.VI.1969, leg. Hoffer.
- Syria**: 4♂♂, 40 km N Damascus, Rankos, 23.V.1996, leg. Halada.
- Turkey**: 3♀♀, 25 km E Malatya Kopoksiz, 8.VII.1997, leg. Halada; 1♀, Karabulak env., 26.VI.1993, leg. Halada; 1♀, 3♂, E of Erzurum, 2000m, 6.VII.2000, leg. Halada; 1♀, Horasan, 18 km E Delibaba, 25.VI.1993, leg. Deneš; 5♂♂, Van Town bor., 28.VI.1993, leg. Deneš; 2♂♂, 30 km E Tatvan, 7.VII.1997, leg. Halada; 1♂, Tatvan env., 30.VI.1993, leg. Deneš; 1♂, Halfeti env., 3.-5.V.1994, leg. Deneš; 1♀, Muradiye, 3.VII.2000, leg. Halada; 1♂, Pr. Van, Van Gölü, E Ercis, 1720m, 9.VIII.1992, leg. Schacht.
- Ukraine**: 1♂, Kherson reg., Tschernomorsk res., V.2000, leg. Gurko.

***Psenulus nigeriae* LECLERCQ 1961**

- Uganda - W**: 2♀♀, SW Hioma Rwera env., 30.XI.2001, leg. Snizek.

***Psenulus nigrolineatus* (CAMERON 1907)**

**L a o s** C e n t r . : 1 ♀, Khammouan prov., Ban Khoun Ngeun, 250m, 18°07'N 104°29'E, XI.2000, leg. Jendek.

***Psenulus ornatus elegans* VAN LITH 1962**

**L a o s** - S o u t h : 1 ♂, Ban Itou env., 10.-18.IV.1999, leg. Sausa; the mesopleuron of this male is black and the first recurrent vein of the forewings ends in the first submarginal cell.

***Psenulus pallipes* (PANZER 1798) (293 ♀ ♀, 149 ♂ ♂)**

**C h i n a** : 4 ♀ ♀, Monan, river Huang He, 37.7°N 111.7°E, 26.-28.V.1996, leg. Halada; 16 ♂ ♂, Ganguyi, 35 km NE Yanan, 36.8°N 110.3°E, 17.-18.V.1996, leg. Halada; 3 ♂ ♂, Suide env., 37.3°N 110.7°E, 13.-14.V.1996, leg. Halada;

**G r e e c e** : 2 ♀ ♀, Pelopones, 20 km N Pilos, Marathopoli, 8.VII.1996, leg. Halada; 1 ♀, Pelopones, Gythion, 26.V.1979, leg. Hladilovi; 1 ♀, Abzweigung nach Tokes, 100m, 21°53' 38°28', 28.V.1987, leg. Malicky; 4 ♂ ♂, Preveza env., 25.VI.1997, leg. Deneš; 1 ♂, Creta, Omalos, 22.-25.V.1990, leg. Kudrna.

**I t a l y** : 1 ♀, Abruzzo Tortoreto Alta, 19-23-IX.1999, leg. Deneš; 1 ♀, Basilicata, 25 km W Lauria, 4.-5.VIII.1999, leg. Halada; 7 ♀ ♀, 1 ♂, Dolomiti, N Trento, 7.VIII.1999, leg. Halada; 2 ♂ ♂, Sardegna, Lanusei env., 29.VI.2000, leg. Kudrna.

**P o r t u g a l** : 1 ♀, Madeira, Funchal, 13.VIII.1992, leg. Witz.

**T u r k e y** : 2 ♀ ♀, 3 ♂ ♂, Gevas/Van Gölü, 29.VI.1993, leg. Deneš; 2 ♀ ♀, 1 ♂, Halfeti env., 11.VI.2000, leg. Deneš; 1 ♀, Göreme, 23.VI.1993, leg. Halada; 1 ♀, Sakarya, Karasu env., 28.VI.1998, leg. Halada; 1 ♀, Konya, 30 km S Aksehir, 24.VI.1998, leg. Halada; 1 ♂, Aciöl, Cardak env., 7.VII.1993, leg. Halada; 1 ♂, Antakia env., 30.IV.1994, leg. Deneš.

**U k r a i n a** : 5 ♀ ♀, 1 ♂, Crimea, Eupatoria, 1.VIII.1999, leg. Gurko; 1 ♀, Crimea, Simpheropod, VI.1997, leg. Gurko; 1 ♀, Gajdavy, 12.VII.1985, leg. Halada; 1 ♂, Crimea, Simpheropod, 10.VI.1998, leg. Gurko; 1 ♀, 1 ♂, Crimea, Eupatoria, 13.VII.2000, leg. Gurko; 1 ♀, Rovne, 14.VII.1985, leg. Deneš.

The remaining specimens come from Bulgaria, Croatia, Czech Republic, Hungary, Romania, Slovakia and Slovenia.

***Psenulus pan* DE BEAUMONT 1967 (6 ♀ ♀, 16 ♂ ♂)**

**I r a n** - C e n t r . : 1 ♂, Pasagrad env., 8.V.1999, leg. Deneš.

**K a z a k h s t a n** - m e r . : 1 ♀, Issik 3 km S, 22.-23.VI.1992, leg. Halada.

**S y r i a** : 1 ♂, Kafr, Suwayds, 21.VI.2000, leg. Halada; 1 ♀, 6 ♂ ♂, Faouar, 35°55'/33°13', 2.V.-27.VIII.2001, leg. Plass.

**T u r k e y** : 2 ♀ ♀, 2 ♂ ♂, 25 km E Malatya, Kopeksiz, 8.VII.1997, leg. Halada; 1 ♀, 40 km E Mut Cometek, 29.V.1996, leg. Halada; 1 ♀, 4 ♂ ♂, Nemrut Dagi mt., 50 km NE Kanta, 2.-14.VI.1996, leg. Jelinek; 1 ♂, Agri env., 27.VI.1993, leg. Jirousek; 1 ♂, Van Town bor., 28.VI.1999, leg. Deneš.

***Psenulus patei* ARNOLD 1940 (3 ♀ ♀)**

**K e n y a** : 1 ♀, Voi (Tsavo) env., 8.-18.XI.1996, leg. Halada; 1 ♀, Voi (Tsavo), 23.III.-4.IV.1997, leg. Halada.

**Z i m b a b w e** - C e n t r . : 1 ♀, NGEZI Rec. Park, Kwekwe, 1.XII.1998, leg. Halada.

***Psenulus paulisae* LECLERCQ 1961**

**K e n y a** : 3 ♂ ♂, Voi (Tsavo) env., 8.-18.XI.1996, leg. Halada.

***Psenulus peterseni* VAN LITH 1970**

**L a o s** - S o u t h : 1 ♀, Ban Itou env., 10.-18.IV.1999, leg. Sausa.

This female differs from the original description in the following details: in mesopleuron only hypo-epimeral area yellow; back of propodeum yellow forming two yellow marks not four as in the original description; Petiole completely yellowish-red; a short and indistinct transverse carina on frons.

***Psenulus pulcherrimus pulcherrimus* (BINGHAM 1896) (5 ♀♀, 9 ♂♂)**

**L a o s :** 1 ♂, Ban Houaykong, 18.-30.IV.1999, leg. Sausa; 1 ♂, Ban Itou env., 10.-18.IV.1999, leg. Sausa; 3 ♀♀, Khammouan prov., Ban Khoun Ngeun, 18°07'N 104°29'E, 250m, XI.2000, leg. Jendek; 1 ♀, Khammouan prov., Nakai, 500-600m, 17°43'N 105°09'E, VI.2001, leg. Jendek.  
**M a l a y s i a :** 1 ♂, Perak, Bukit Larut, 23.-25.II.2000, leg. Deneš; 1 ♀, Perak, Bukit Berapit, 21.-22.II.2000, leg. Deneš; 1 ♂, Ipoh, 5 km E Tanjong Rambutan, 3.-15.IV.2000, leg. Snizek; 1 ♂, Perak, Gerik env., 26.-28.II.2000, leg. Deneš.  
**T h a i l a n d - b o r . :** 4 ♂♂, Chiang Dao env., 21.V.1995, leg. Snizek.

***Psenulus puncticeps* (CAMERON 1907) (5 ♀♀, 1 ♂)**  
 (= *Psenulus antennatus* (ROHWER 1923))

**L a o s - C e n t r . :** 1 ♀, Khammouan prov., Nakai, 550-600m, 17°43'N 105°09'E, VI.2000, leg. Jendek.  
**M a l a y s i a - W :** 4 ♀♀, 1 ♂, Ipoh, 5 km E Tanjong Rambutan, 3.-15.IV.2000, leg. Snizek

***Psenulus quadridentatus* VAN LITH 1962 (2 ♀♀, 1 ♂)**

**L a o s :** 1 ♂, Louangnantha prov., 21°09'N 10°10'E, Nantha-Muang Sing, 900-1200m, 5.-31.V.1997, leg. Kuban.  
**M a l a y s i a :** 1 ♀, Perak, Gerik env., 26.-28.II.2000, leg. Deneš; 1 ♀, Pahang, Tanah Rata env., 17.-20.II.2000, leg. Deneš.

***Psenulus schencki* (TOURNIER 1889) (36 ♀♀, 32 ♂♂)**

**G e o r g i a :** 1 ♀, 2 ♂♂, Caucasus centr., Svaneris, Mestia, 1600-2000m, 17.-30.VI.1989, leg. Deneš.  
**G r e e c e :** 3 ♂♂, Preveza env., 25.VI.1997, leg. Deneš; 1 ♂, Phtiotis, S Timfristos, 38°55'N 21°51'E, 750m, 22.VII.1990, leg. Rausch; 1 ♂, Pelopones, Messenien, Likeo-Geb. NW Agios Sotis, 37°28'N 21°56'E, 1050m, 2.VI.1990, leg. Rausch; 2 ♂♂, Pelopones, Lakonien, W Rihea, 700-800m, 36°51'N 22°58'E, 30.V.1990, leg. Rausch; 1 ♂, Kreta, Iraklion, Ida Geb., Weide E d. Skinakas, 35°13'N 24°56'E, 1050-1100m, 8.-9.VI.1993, leg. Rausch; 1 ♂, Insel Kephallonia, Enos Oros (NW des Gipfels), 38°10'N 20°40'E, 1100-1200m, 4.-5.VI.1990, leg. Rausch.  
**M o r o c c o :** 1 ♂, Taraudant, 22.IV.1990, leg. Halada.  
**T u r k e y :** 1 ♀, Konya, 10 km S Aksehir mts., 25.VI.1998, leg. Halada; 1 ♂, Antaria env., 30.IV.1994, leg. Halada; 1 ♂, Guzelos, Capadocia, 15.VI.1998, leg. Halada; 1 ♂, 25 km E Malatua Kopeksiz, 8.VII.1997, leg. Halada; 1 ♂, 20 km Gurun, Mezikirah Gecidi, 10.VII.1997, leg. Halada; 1 ♂, Prov. Denizli, S Acipayam, 1000m, 37.28°N 29.22°E, 29.V.1981, leg. Rausch; 1 ♂, Prov. Izmir, N Bozdog, NE Ödemiş, 28.22°N 27.58°E, 1000m, 14.VI.1985, leg. Rausch; 1 ♂, Tuzlagozu (Baykan), 4.VI.1998, leg. Halada.  
**U k r a i n a :** 1 ♀, Crimea, Belogorst, 2.VI.1989, leg. Gurko; 1 ♂, Crimea, Simpheropol, 10.VI. 1998, leg. Gurko.

The remaining specimens come from Bulgaria, Czech Republic and Slovakia.

***Psenulus stevensoni* ARNOLD 1940**

**K e n y a :** 1 ♂♂, Voi (Tsavo), env., 22.IX.-2.XII.1996, leg. Halada.

***Psenulus suifuensis* VAN LITH 1972**

C h i n a : 1 ♀, Yunnan prov., Heishui, 35 km N Lijiang, 27.13°N 100.19°E, 18.VI.-4.VII.1993, leg. Becvar.

***Psenulus varius* VAN LITH 1962 (2 ♀♀, 4 ♂♂)**

L a o s - C e n t r : 1 ♀, Khammouan prov., Ban Khoun Ngeun, 18°17'N 104°29'E, 250m, XI.2000, leg. Jendek; 1 ♀, Khammouan prov., Nakai, 500-600m, 17°43'N 105°09'E, leg. Jendek; 1 ♂, Ban Itou env., 10.-18.IV.1999, leg. Sausa.

M a l a y s i a : 2 ♂♂, Ipoh, 5 km E Tanjong Rambutan, 3.-15.IV.2000, leg. Snizek; 1 ♂, Perak, Gerik env., 26.-28.II.2000, leg. Deneš.

***Psenulus* sp.**

T h a i l a n d : 1 ♂, Mae Hong Son prov., Soppong, 1500m, 19°27'N 98°20'E, 7.-12.V.1996, leg. Becvar.

This male is characterized by the following details: small specimen (6 mm); head, thorax and gaster black; fore- and midtibiae and tarsi brown; carina between antennae dorsally broadened and excavate, transverse carina below antennae distinct; antennae short (flagellomere III 1.5 × as long as broad) without tyloidea; prescutal sutures only on anterior part of scutum; propodeum behind enclosed area polished; first recurrent vein of fore wings interstitial, second recurrent vein ending in third submarginal cell; petiolus as long as tergite I.

***Psenulus* sp.**

L a o s - S o u t h : 1 ♀, Ban Itou env., 10.-18.IV.1999, leg. Sausa.

This female is characterized by the following details: small specimen (7 mm); head and thorax black; petiolus and gaster red; fore- and midtibiae brown; Clypeus anterior margin broadly smooth and shining, bidentate; frontal carina prominent between antennae, dorsally broadened and excavate; frontal carina ending below antennae in a short transverse carina, in the shape of a reversed V with obtuse angle; prescutal sutures well-defined until hind margin of scutum; propodeum behind enclosed area smooth and shining; no distinct pygidial area; first recurrent vein of fore wings interstitial, second recurrent vein ending in the third submarginal cell.

***Psenulus* sp.**

K e n y a : 6 ♂♂, Voi (Tsavo) env., 8.-18.XI.1996, leg. Halada.

These males are closely related to *paulisae* LECLERCQ 1961, but are recognized by the triangular (rarely slightly open) second submarginal cell of the fore wings; scutum coarsely punctate and with coarse transverse striation; base of hind tibiae pale yellowish. This may be the unknown male of *Psenulus patei* ARNOLD 1940.

***Psenulus* sp.**

K e n y a -S E : 1 ♂, Voi (Tsavo), 23.III.-4.IV.1997, leg. Halada.

This male seems to be closely related to *Psenulus stevensoni* ARNOLD 1940, and is characterized by the following: thorax, petiole and gaster black, femora brown; fore- and midtibiae and all tarsi pale yellowish, hindtibiae basal half pale yellow, distal half

brown; tempora finely striate; interantennal carina slightly broadened, no distinct transverse carina; antennal segments X-XII about as long as broad, segments IV-XII with narrow longitudinal tyloidea; scutum shining with coarse punctation, prescutal sutures reaching hind margin, posteriorly more alveolate than apical; upper part of back of propodeum coarsely obliquely striate; petiole one and a half times as long as first tergite; second submarginal cell not petiolate or triangular.

**Tribe: Pemphredonini DAHLBOM 1835**

**Subtribe: Pemphredonina DAHLBOM 1835**

***Pemphredon* LATREILLE 1796**

***Pemphredon austriaca* (KOHLE 1888) (12♂♂)**

Czech Republic: 1♂, S-Bohemia, Clum u Trebone, VI.2000, leg. Halada; 1♂, Bohemia-S, Trisov Vltava riv., 26.VI.1999, leg. Halada.

Italy: 1♂, Calabria, 15 km S Lokri, 1.-2.VIII.1999, leg. Halada; 1♂, Calabria, Palmi, 3.VIII.1999, leg. Halada.

Slovakia -E: 1♂, Kosice env., VI.1952, leg. Kocourek.

Slovenia - W: 1♂, 5 km E Koper, 10.VII.1999, leg. Halada.

Turkey -S: 2♂♂, Harbie, Antakya, 17.VI.2000, leg. Halada.

Ukraine: 1♂, Crimea, Simpheropol, 8.VIII.1999, leg. Gurko; 1♂, Crimea, Eupatoria, 1.VIII.1999, leg. Gurko.

***Pemphredon flavistigma* THOMSON 1874**

Czech Republic: 1♀, 1♂, S-Bohemia, 20 km S C. Budejovice Trisov, 24.V.1999, leg. Halada.

***Pemphredon inornata* SAY 1824 (24♀♀, 37♂♂)**

Italy: 1♀, Dolomiti, N Trento, 7.VII.1999, leg. Halada; 4♂♂, Lazio, 100 km N Roma Todi, 27.VII.1999, leg. Halada.

Ukraine: 3♀♀, 2♂♂, Crimea, Simpheropol, 8.VIII.1999, leg. Gurko; 2♀♀, 1♂, Crimea, Eupatoria, 24.VII.1999, leg. Gurko.

The remaining specimens come from Czech Republic.

***Pemphredon lethifer* (SHUCKARD 1837) (91♀♀, 35♂♂)**

Croatia: 1♀, Istria, Vodnjan env., 7.-9.VII.1999, leg. Halada.

Italy: 1♀, Sardegna, Aritzo city, 1.VII.2000, leg. Halada; 1♀, Lazio, 100 km N Roma Todi, 27.VII.1999, leg. Halada; 1♀, 1♂, Sardegna NE, Obia env., 4.VII.2000, leg. Halada; 1♀, 90 km N Napoli Gaeta, 28.VII.1999, leg. Halada; 56♀♀, 1♂, Calabria, 15 km S Lokri, 1.-2.VIII.1999, leg. Halada; 1♂, Calabria, Palmi, 3.VIII.1999, leg. Halada; 1♂, Sardegna, Lanusei env., 29.VI.2000, leg. Halada; 1♂, Dolomiti, N Trento, 7.VIII.1999, leg. Halada.

Turkey: 2♀♀, Halfeti env., 11.VI.2000, leg. Halada; 1♂, Antakya, 28.III.1999, leg. Halada.

Ukraine: 1♀, Crimea, Sudak, 20.VI.1990, leg. Gurko; 1♀, 1♂, Crimea, Eupatoria, 1.VIII.1999, leg. Gurko; 3♂♂, Crimea, Simpheropol, 27.VII.1998, leg. Gurko.

The remaining specimens come from Czech Republic, Slovenia and Slovakia.

***Pemphredon montana* DAHLBOM 1845 (2 ♀ ♀)**

Czech Republic: 1 ♀, Bohemia-S, Prachatice, Amostov, VIII.1999, leg. Halada; 1 ♀, Bohemia-S, C. Krumlov, VII.1999, leg. Halada.

***Pemphredon morio* VANDER LINDEN 1829 (5 ♀ ♀, 3 ♂ ♂)**

Czech Republic: 3 ♀ ♀, 2 ♂ ♂, Bohemia-S, Chlum u Trebone, VI.2000, leg. Halada; 1 ♀, Praha-Motal, VI.1970, leg. Kocourek.  
Kirgiziy a: 1 ♀, Fergan mts., Kyzul-Ungus, 27.V.1999, leg. Gurko.  
Ukraina: 1 ♂, Crimea, Eupatoria, 22.VI.1999, leg. Gurko.

***Pemphredon lugens* DAHLBOM 1842 (5 ♀ ♀)**

These females come all from Czech Republic.

***Pemphredon lugubris* (FABRICIUS 1793) (2 ♀ ♀, 2 ♂ ♂)**

Kirgiziy a: 1 ♀, Kirgiziya mts., 1800m, Ala-Archa riv., Kashkasi, 25.7.1999, leg. Gurko.  
The remaining specimens come from Czech Republic.

***Pemphredon podagrica* CHEVRIER 1870**

Czech Republic: 1 ♂, Bohemia-S, Chlum u Trebone, V.2000, leg. Halada.

***Pemphredon rugifer* DAHLBOM 1844 (6 ♀ ♀, 5 ♂ ♂)**

Croatia: 1 ♀, Istria, Vodnjan env., 7.-9.VII.1999, leg. Halada.  
Italy: 1 ♀, Lazio, 100 km N Roma Todi, 27.VII.1999, leg. Halada.  
The remaining specimens come from Bulgaria, Czech Republic and Slovenia.

***Pemphredon tridentata* GUSSAKOVSKIJ 1952**

Kirgiziy a: 1 ♀, Sandelashky mts., Kuzu-Tegerek, VII.1998, leg. Gurko.  
For other specimens of *Pemphredon* in the Collection of "Biologiezentrum Linz" see Dollfuss 2001.

***Passaloecus* SHUCKARD 1837**

***Passaloecus australis* MERISUO 1976**

Turkey -E: 1 ♀, 20 km W Van, 5.VII.1997, leg. Halada.  
This species is similiar to *P. singularis*, maybe it is a variation of *singularis*.

***Passaloecus borealis* DAHLBOM 1845 (27 ♀ ♀, 19 ♂ ♂)**

Kazakhstan: 1 ♀, Alma Ata, 15 km S Medek, 13.VII.1981, leg. Kocourek.  
The remaining specimens come from Bulgaria, Czechie, Romania and Slovakia.

***Passaloecus brevilabris* WOLF 1958 (43 ♀ ♀, 6 ♂ ♂)**

France: 1 ♂, Corsica merid, Porto Vecchio-Muratello, 50m, 8.V.1969, leg. Tkalcu.

The remaining specimens come from Austria, Bulgaria, Czech Republic and Slovakia.

***Passaloecus clypealis* FAESTER 1947 (6 ♀♀, 8 ♂♂)**

B u l g a r i a : 1 ♀, Ropotano, 11.VIII.1979, leg. Hoffer; 1 ♂, Trakia, Trud, 20.VIII.1997, leg. Zaykov.  
 C h i n a -E: 5 ♂♂, Zhongtiao Shan mt. c., 45 km W Sanmenxia, 27.V.1996, leg. Halada.  
 C z e c h R e p u b l i c : 1 ♀, Moravia, Pouzdrany, 3.VI.1978, leg. Kocourek; 1 ♀, Moravia, Vyskov, 24.VII.1976, leg. Kocourek.  
 F r a n c e -SW: 2 ♂♂, Agde (Vias), 4.V.1997, leg. Mucka.  
 I t a l y : 1 ♀, Emilia Romagna, 60 km N Ravenna, 8.VII.2000, leg. Halada.  
 K a z a k h s t a n : 1 ♀, 20 km SE Aksay env., 16.-19.VI.1992, leg. Deneš.  
 K i r g i z i y a -W: 1 ♀, Afleatum env., 41.6°N 71.6°E, 1.-3.VI.1995, leg. Halada.  
 S l o v a k i a : 1 ♀, Somotor, VI.1912, leg. Kocourek.

***Passaloecus corniger* SHUCKARD 1837 (12 ♀♀, 29 ♂♂)**

M o r o c c o : 1 ♀, 12 km E Ifrane, 9.-10.V.1997, leg. Halada.

The remaining specimens come from Austria, Bulgaria, Czech Republic, Finland, Romania and Slovakia.

***Passaloecus eremita* KOHL 1893 (42 ♀♀, 12 ♂♂)**

K a z a k h s t a n -SW: 1 ♂, Alma Ata, 1.VI.1994, leg. Halada.

The remaining specimens come from Bulgaria, Czech Republic, Finland and Hungary.

***Passaloecus gracilis* (CURTIS 1834) (83 ♀♀, 29 ♂♂)**

F r a n c e : 2 ♂♂, Corsica merid., Bonifacio, 12.-14.V.1969, leg. Tkalu.  
 G r e e c e : 1 ♂, Creta, Chania Lefka Ori, 2 km NE Omalos, 35°21'N 23°56'E, 1250m, 4.VI.1993, leg. H. & R. Rausch.  
 I t a l y : 1 ♀, Lazio, 100 km N Roma, Todi, 27.VII.1999, leg. Halada; 1 ♂, Toscana, 20 km NE Firenze, 5.-6.VII.2000, leg. Halada.  
 M o r o c c o : 2 ♂♂, Marrakech, 15.IV.1990, leg. Halada; 1 ♂, Nados, 14.IV.1990, leg. Halada.  
 T u r k e y : 1 ♂, Bitlis Nemrut Dag, 2000m, 16.VIII.1991, leg. Halada.  
 U k r a i n a : 1 ♂, Crimea, Simpheropol, 15.VII.1999, leg. Gurko; 1 ♂, Crimea, Eupatoria, 28.VI.1999, leg. Gurko.

The remaining specimens come from Austria, Bulgaria, Croatia, Czech Republic and Slovakia.

***Passaloecus insignis* (VANDER LINDEN 1829) (74 ♀♀, 29 ♂♂)**

These specimens come from Austria, Bulgaria, Czech Republic, Germany, Romania and Slovakia.

***Passaloecus monilicornis* DAHLBOM 1842 (22 ♀♀, 25 ♂♂)**

K a z a k h s t a n : 1 ♀, Alma Ata 15 km S, Medeo, 13.VII.1981, leg. Kocourek.

The remaining specimens come from Czech Republic and Finland.

***Passaloecus pictus* RIBAUT 1952 (9 ♀♀, 2 ♂♂)**

A l g e r i a : 1 ♀, Alger-Zeralda, 10.VI.1972, leg. Hoffer.

**I t a l y** : 2 ♀♀, 2 ♂♂, Sardinia, Lanusei env., 29.VI.2000, leg. Halada; 1 ♀, Dolomiti, N Trento, 7.VIII.1999, leg. Halda; 1 ♀, Liguria, Alassio, Höhenstr., 8.-10.1994, leg. Tiefenthaler.  
**M a k e d o n i j a** : 1 ♀, Radovici, VI.1977, leg. Deneš.  
**M o r o c c o** : 1 ♀, Meknes env., 19.V.1997, leg. Deneš; 1 ♀, Pilote env., N Khemisset, 19.V.1997, leg. Prudek.  
**S y r i a** : 1 ♀, 50 km SE Suwayda Anata, 20.-21.V.1996, leg. Halada.

***Passaloecus ribauti* MERISUO 1974 (26 ♀♀, 8 ♂♂)**

**A l g e r i a** : 1 ♀, Djanet, 27.X.1975, leg. Hoffer.  
**C r o a t i a** : 1 ♀, Istria, 10 km N Pula, 25.-27.VIII.1998, leg. Halada; 2 ♂♂, Island Uglian (Kali), 18.VII.1966, leg. Hoffer; 1 ♂, Senj, 13.VII.1993, leg. Halada.  
**G r e e c e** : 1 ♀, Pelopones, 20 km N Pilos Mara Thopoli, 9.VII.1996, leg. Halada; 1 ♀, Klnetra env., 3.VII.1997, leg. Deneš; 2 ♀♀, Pelopones, Korinth, Onia E Sofiko Angelokastro, 37°46'N 23°01'E, 650-800m, 22.-23.V.1990, leg. H. & R. Rausch.  
**S e r b i j a** : 1 ♂, Ulcinj, 29.VI.1969, leg. Hoffer.  
**S y r i a** : 1 ♀, NW Jisr ash Shugur, 10.-11.V.1996, leg. Halda.  
**T u r k e y** : 1 ♀, 10 km W Gaziantep, 20.VI.1997, leg. Halada; 1 ♂, Halfeti (Birecik), 30.V.1998, leg. Snizek; 1 ♂, Halfeti env., 11.2000, leg. Deneš; 1 ♂, W Mersin, Kuzucubeien, 15.VI.2000, leg. Halada.  
**U k r a i n a** : 1 ♀, 1 ♂, Crimea, Jalta env., 8.-10.VII.1985, leg. Halada & Deneš.

The remaining specimens come from Bulgaria.

***Passaloecus singularis* DAHLBOM 1844 (190 ♀♀, 95 ♂♂)**

**I t a l y** : 2 ♀♀, Toscana, isl. Orbetello, 6.VIII.1999, leg. Halada; 1 ♀, Lazio, 100 km N Roma Todi, 27.VII.1999, leg. Halada.  
**R o m a n i a** : 1 ♀, Fagaras, Girtisoara, 8.VIII.1999, 700m, leg. Snizek.  
**T u r k e y** : 1 ♂, Van town bor., 28.VI.1993, leg. Deneš; 1 ♀, Acigöl, Cardak env., 7.VII.1993, leg. Deneš.  
**U k r a i n a** : 1 ♂, Crimea, Simpheropol, 15.VII.1999, leg. Gurko; 1 ♀, Crimea, Sudak, 26.VI.1990, leg. Gurko.

The remaining specimens come from Austria, Bulgaria, Czech Republic, Finland, Macedonia; Serbija, Slovakia and Slovenia.

***Passaloecus turanicus* GUSSAKOVSKIJ 1952 (7 ♀♀, 5 ♂♂)**

This species is very similiar to *P. singularis*, maybe it is a variation in collour of *P. singularis*.

**K i r g i z i y a** : 1 ♀, Dzhalal-Abadskaya, Distr. Chatkal, Ters riv., 7 km SW Kyzyl, 2.VII.1996, 41°37'N 70°41'E, 1600m, leg. Rausch; 1 ♀, 10 km S Sari-Tzelek, 42°N 72°E, 5.VI.1995, leg. Mucka; 1 ♀, Arslanbad, 41.3°N 72.0°E, 12.-13.VI.1995, leg. Halada; 1 ♂, Dzhalal-Abadskaya, Distr. Chatkal, Ese-Pass Chap-Chyma, Chatkalsky Khrebet, 41°30'N 70°53'30''E, 2150-2300m, leg. Rausch; 1 ♂, Oshskaya Obl., Distr. Dchon-Alajsky, Alai-Geb., Ok-Suu, 39°31'02''N 71°40'57''E GPS, 2500-2800m, 17.VII.1998, leg. H. & R. Rausch; 1 ♂, Oshskaya Obl., Freg. Khrebet, NE Passhöhe, Urumbash, 41°20'N 73°40'E, 2000m, 13.-15.VI.1995, leg. H. & R. Rausch; 1 ♂, Terek-Sai, 41.5°N 71.1°E, 7.VI.1995, leg. Halada.  
**U z b e k i s t a n** : 1 ♀♀, Vil. Taschkent, Tschatkal-Geb., Berg Surekata, 41°24'08''N 69°51'05''E GPS, 1550-1700m, 15.-17.VI.1997, leg. H. & R. Rausch; 1 ♀, Dzhezak, Turest, Khebet, 5 km S Douba, 39°41'19''N 68°28'55''E GPS, 1550-1850m, 13.VI.1997, leg. H. & R. Rausch; 1 ♀, Vil. Samarkand, Seratschan-Geb., Aman Kutun-Pass, 39°17'54''N 66°54'20''E GPS, 1700m, 7.-8.VI.1997, leg. H. & R. Rausch; 1 ♂, Samarkand env., 19.-21.V.1994, leg. Halada; 1 ♂, Kara-kum des./Chiva env., 1.V.1980, leg. Haladil.



***Passaloecus vandeli* RIBAUT 1952 (5 ♀, 5 ♂)**

- Austria: 1 ♀, 4 ♂, Linz, Hasenberg b. Steyregg, 10.VIII.1996, leg. Tiefenthaler.  
 Bulgaria: 1 ♀, Rododpi Hrabrino, 1.IX.1997, leg. Zaykov; 1 ♀, St. Planina Beronovo, 18.VIII.1996, leg. Zaykov; 1 ♂, mont. Pirin m. occ., 1000-1500m, 2.VIII.1982, leg. Halada; 1 ♂, m.-w., Sandanski, V.1967, leg. Kocourek.  
 Czech Republic: 1 ♀, Bohemia, Majdalena, 24.VII.1978, leg. Deneš.  
 Turkey: 1 ♀, Nemrut Dagı mt., 50 km NE Kanta, 2.-14.VI.1996, leg. Jelinek.

***Polemistus* SAUSSURE 1892**

***Polemistus abnormis* (KOHLE 1888) (2 ♀, 1 ♂)**

- China-centr.: 1 ♀, 1 ♂, Monan river, Huang He, 34.7°N 111.7°E, 26.-28.V.1996, leg. Halada.  
 Thailand: 1 ♀, Mae Hong Son prov., Soppong, 1500m, 19°27'N 98°20'E, 15.-17.XI.1996, leg. Becvar.

***Polemistus baliensis* TSUNEMI 1992**

- Laos: 2 ♀, Khammouan prov., Ban Khoun Ngeun, 18°07'N 104°26'E, XI.2000, leg. Jendek.

***Polemistus braunsii braunsii* (KOHLE 1905) (43 ♀, 38 ♂)**

- Berlin (Africa SE): 1 ♀, Cove riv., Zon, 16.IV.2000, leg. Halada.  
 Central African Republic: 1 ♀, Kembe 10 km W, 4°29'N 21°53'E, 3.VIII.1985, leg. Dollfuss; In this female the projecting process between antennal sockets is broadened and bifurcate!  
 Kenya: 2 ♀, Taita Hills, Wundanyi, 18.-22.III.1997, leg. Halada; 9 ♀, 8 ♂, Voi (Tsavo), 23.III.-4.IV.1997, leg. Halada; 7 ♀, Voi (Tsavo) env., 22.XI.-2.XII.1996, leg. Halada; 2 ♀, 23 ♂, Voi env. (Tsavo), 8.-18.XI.1996, leg. Halada; 1 ♀, E-Kenya, Katutu-Kithioko, 27.XI.1999, leg. Snizek; 1 ♂, Voi (Tsavo), 11.14.IV.1997, leg. Halada.  
 Malawi (Africa): 1 ♀, 85 km SE Lilongwe Dedza, 17.-19.XII.2001, leg. Halada; 1 ♂, Nkhata Bay, lake Malawi, 1.I.2001, leg. Halada; 1 ♂, 180 km SE Lilongwe Balaka, 20.XII.2001, leg. Halada.  
 Republic of South Africa: 13 ♀, 2 ♂, KW. Natal S, 17 km SE Richmond, 3.II.2000, leg. Halada; 1 ♀, Eastern Cape, 10 km SE Alexandria, Nat. Res., 28.-31.I.2000, leg. Halada; 1 ♂, Northwest prov., Kerksdorf, 11.I.2001, leg. Snizek.  
 Zimbabwe: 2 ♀, Ngezi Rec. Park, Kwekwe, 1.XII.1998, leg. Halada; 1 ♀, Karoi, Vuti env., 18.XII.1996, leg. Smrz; 1 ♀, Bubi riv., Bubi, 8.XII.1998, leg. Halada; 1 ♀, Masvingo, 22.I.1998, leg. Halada; 1 ♂, 40 km S Chipinge, Mt. Selinda, 13.XII.1998, leg. Halada.

***Polemistus braunsii ferrugineipes* (ARNOLD 1929) (5 ♀, 5 ♂)**

- Central African Republic: 5 ♀, 3 ♂, 90 km SW Kembe, 4°29'N 21°53'E, 23.VII.1985, leg. Dollfuss; 2 ♂, Kembe, 4°29'N 21°53'E, 6.VIII.1985, leg. Dollfuss.

***Polemistus fukuitor* TSUNEMI 1992, (7 ♀, 1 ♂)**

- Laos: 1 ♀, Khammouan prov., Ban Khoun Ngeun, 18°07'N 104°29'E, 200m, 24.-29.IV. 2001, leg. Kuban; 1 ♀, Laos-S, Ban Houaykong, 18.-30.IV.1999, leg. Sausa; 1 ♀, Khammouan prov., Ban Khoun Ngeun, 18°07'N 104°29'E, 200m, XI.2000, leg. Jendek.  
 Thailand: 2 ♀, 1 ♂, N Mae Hong Son prov., Soppong env., 600m, 28.V.-2.VI.1999, leg. Riha; 1 ♀, Loei prov., Phu Krad N.P., 1300m, 16°53'N 101°47'E, 11.-15.V.1999, leg. Riha; 1 ♀, Mae Hong Son prov., Soppong, 1500m, 19°27'N 98°20'E, 7.-12.V.1996, leg. Becvar.

***Polemistus luzonensis* ROHWER 1919 (2 ♀ ♀)**

**L a o s :** 1 ♀, Louangnamtha prov., Namtha Muang Sing., 21°09'N 101°19'E, 900-1200m, 5.-31.V.1997, leg. Kuban.

**T h a i l a n d :** N Mae Hong Son prov., Soppong env., 600m, 28.V.-2.VI.1999, leg. Riha.

***Polemistus palawanensis* TSUNEKI 1992 (11 ♀ ♀)**

**B o r n e o :** 1 ♀, Sabah W., Crocker Range W., route Keningau-Papar, II.2000, leg. Snizek; 1 ♀, Sabah W., Crocker range E., W Apin Apin, II.2000, leg. Snizek.

**L a o s :** 4 ♀ ♀, Louangnamtha prov., Namtha-Muang Sing, 900-1200m, 21°09'N 101°19'E, leg. Kuban; 1 ♀, Khammouan prov., Ban Khoun Ngeun, 250m, 18°07'N 104°29'E, XI.2000, leg. Jendek.

**T h a i l a n d :** 3 ♀ ♀, N Mae Hong Son prov., Soppong env., 600m, 28.V.-2.VI.1999, leg. Riha; 1 ♀, Pai (Soppong), 28.V.-5.VII.1997, leg. Snizek.

***Polemistus philippinensis* TSUNEKI 1992 (4 ♀ ♀)**

**S u m a t r a - E :** 2 ♀ ♀, Riau prov., Bukit Tigapuluh N.P., 0°50'S 102°26'E, 18.-25.I.2000, leg. Bezdek.

**T h a i l a n d :** 2 ♀ ♀, Chumphon prov., Pha To env., 1.-11.V.1998, leg. Prudek & Sigut.

***Polemistus schoutedeni* (LECLERCQ 1959) (8 ♀ ♀, 1 ♂)**

**C e n t r a l A f r i c a n R e p u b l i c :** 4 ♀ ♀, 1 ♂, Kembe, 4°29'N 21°53'E, 8.VII.1985, leg. Dollfuss; 1 ♀, Kembe, 4°29'N 21°53'E, 17.VIII. 1985, leg. Dollfuss; 3 ♀ ♀, Kembe, 4°29'N 21°53'E, 3.VIII.1985, leg. Dollfuss.

***Polemistus sumatrensis* (MAIDL 1925) (5 ♀ ♀)**

**B o r n e o :** 1 ♀, Sabah W, Crocker range E, W Apin Apin, II.2000, leg. Snizek.

**M a l a y s i a :** 1 ♀, Perak, Bukit Berapit, 21.-22.II.2000, leg. Deneš.

**T h a i l a n d -NE:** 3 ♀ ♀, Loei prov., Phu Kradung N.P., 1300m, 16°53'N 101°47'E, 11.-15.V.1999, leg. Riha.

***Polemistus sumatrensis yoshikawai* (TSUNEKI 1961) (5 ♂ ♂)**

**M a l a y s i a - W P e r a k :** 1 ♂, 40 km SE Ipoh, 4°25'N 101°23'E, Cameron Highlands, Ringlet, 25.IV.-5.V.2001, leg. Riha.

**T h a i l a n d :** 3 ♂ ♂, Loei prov., Phu Kradung N.P., 1300m, 16°53'N 101°47'E, 11.-15.V.1999, leg. Riha; 1 ♂, Mae Hong Son prov., Soppong env., 600m, 28.V.-2.VI.1999, leg. Riha.

Maybe this ssp. is the unknown male of *P. sumatrensis* MAIDL.

***Polemistus* sp.**

**T h a i l a n d :** 1 ♀, 2 ♂ ♂, Mae Hong Son prov., Soppong, 1500m, 19°27'N 98°20'E, 7.-12.V.1996, leg. Becvar.

These specimens probably belong to a new species!

**Subtribe: *Spilomenina* MENKE 1989**

***Spilomena* SHUCKARD 1838**

***Spilomena beata* BLÜTHGEN 1953 (34 ♀ ♀, 3 ♂ ♂)**

These specimens come from Austria, Bulgaria and Czech Republic.

***Spilomena curruca* (DAHLBOM 1843) (2 ♂ ♂)**

(= *Spilomena pulawskii* DOLLFUSS 1983)

Czech Republic: 1 ♂, Bohemia, Majdalena, leg. Deneš; 1 ♂, Moravia, Vyskov, XII. e.l., 1965, leg. Kocourek.

***Spilomena differens* BLÜTHGEN 1953 (34 ♀ ♀)**

These females come from Austria, Bulgaria, Czech Republic and Slovakia.

***Spilomena enslini* BLÜTHGEN 1953 (20 ♀ ♀, 5 ♂ ♂)**

Austria: 1 ♀, Oö. Langzwettl N Zwettl/R., 29.VII.1981, leg. Schwarz.

Czech Republic: 1 ♀, 1 ♂, Bohemia, Majdalena, 17.VI.1968, leg. Benes.

The remaining specimens come from Finland.

***Spilomena maghrebensis* DOLLFUSS 1983 (6 ♀ ♀, 1 ♂)**

Jordan: 4 ♀ ♀, 30 km N Tafila, 2.V.1996, leg. Halada; 1 ♀, Zurga-Main, 7.V.1995, leg. Deneš.

Morocco: 1 ♀, Nador, 14.IV.1990, leg. Halada.

Tunisia: 1 ♂, Hammamet env., 15.III.1996, leg. Deneš.

***Spilomena mocsaryi* KOHL 1898 (117 ♀ ♀, 4 ♂ ♂)**

(= *Spilomena zavadili* SNOFLAK 1942)

Bulgaria: 1 ♂, Sandanski, VII.1966, leg. Kocourek.

Czech Republic: 1 ♂, (type of *Spilomena zavadili* SNOFLAK) Moravia orient., Velehrad, 15.8.1936, leg. Dr. Hoffer.

Italy: 2 ♀ ♀, Abruzzo, Tortoreto Alta, 19.-23.IX.1999, leg. Deneš; 1 ♀, Abruzzo, 30 km N Pescara, 23.VIII.1997, leg. Halada; 1 ♀, Sardegna, SE Muravera, 2.VII.2000, leg. Halada; 1 ♀, Sardegna NE, Obi env., 4.VII.2000, leg. Halada.

Jordan: 5 ♀ ♀, 1 ♂, Petra, 14.V.1995, leg. Deneš.

Kirgizia: 1 mer.-west: 7 ♀ ♀, Kizil-kiya, 40.2°N 72.1°E, 15.V.1994, leg. Deneš.

Syria: 1 ♀, NW Aleppo, Bulbul, 24.VI.2000, leg. Halada.

Turkey: 8 ♀ ♀, Ankara, 22.VI.1993, leg. Deneš; 1 ♀, Halfeti env., 11.VI.2000, leg. Deneš; 1 ♂, Halfeti env., 3.-5.V.1994, leg. Deneš.

The remaining specimens come from Bulgaria, Czech Republic and Slovakia.

***Spilomena punctatissima* BLÜTHGEN 1953**

Austria: 1 ♀, Oö. Gründberg, 11.VI.1937, leg. Kloiber.

***Spilomena rudesculpta* GUSSAKOVSKIJ 1952**

Uzbekistan: 1 ♀, Machtali, 120 km E Taschkent, 2.V.1988, leg. Halada.

***Spilomena troglodytes* (VANDER LINDEN 1829) (131 ♀ ♀, 15 ♂ ♂)**

Greece -W: 1 ♀, Preveza env., 25.VI.1987, leg. Deneš.

Italy: 1 ♀, Sicilia, arina di Modica, 15.VII.1982, leg. Schwarz; 1 ♀, 90 km N Napoli, Gaieta, 28.VII.1998, leg. Halada.

Turkey: 1 ♂, Ankara, 22.VI.1993, leg. Deneš.

The remaining specimens come from Austria, Bulgaria, Croatia, Czech Republic and Slovakia.

***Spilomena* sp.**

The following material could not be named: Thailand (16), Laos (2), Kenya (1), Republic South Africa (5), Chile (2) and China (1).

**Subtribe: *Ammoplanina* EVANS 1959**

***Ammoplanus* GIRAUD 1869**

***Ammoplanus hofferi* SNOFLAK 1943 (4 ♀♀)**

**Bulgaria:** 1 ♀, Sandanski, 26.-31.V.1967, leg. Kocourek.

**Slovakia mer.:** 1 ♀, Sturovo, VII.1953, leg. Kocourek.

**Turkey:** 1 ♀, 15 km E Malatya, 27.VI.2000, leg. Halada; 1 ♀, 10 km S Ahlat, 24.VI.1997, leg. Halada.

***Ammoplanus kaszabi* TSUNEKI 1972**

**Turkey:** 1 ♀, Karadut env. 50 km NE Adiyaman, 1000m, leg. Deneš.

***Ammoplanus mandibularis* CAMERON 1903 (5 ♀♀, 1 ♂)**

**Republic of South Africa:** 1 ♀, 1 ♂, Eastern Cape, 7 km S Cradock, 25.I.2000, leg. Halada; 3 ♀♀, Northern Cape, SW of Springbok, 4.XI.1999, leg. Halada; 1 ♀, Northern Cape, SW of Springbok, Buffelswadi, 4.XI. 1999, leg. Halada.

***Ammoplanus marathroicus* (DE STEFANI 1887) (41 ♀♀, 13 ♂♂)**

(= *Ammoplanus handlirschi* GUSSAKOVSKIJ 1931)

**Bulgaria:** 13 ♀♀, 1 ♂, Sandanski env., VI.1968, leg. Kocourek; 2 ♀♀, Sandanski, 26.-31.V.1967, leg. Kocourek; 1 ♂, Sandanski, VII.1966, leg. Kocourek.

**Jordan:** 1 ♀, 30 km N Tafila, 2.V.1996, leg. Halada; 1 ♂, Aljun, 5.V.1995, leg. Deneš.

**Kazakhstan:** 1 ♂, S Zhapark Saline, VI.2001, leg. Miatlenski.

**Kirgiziya:** 1 ♀, Alai Mts., 50 km Galtyska, 7.VI.2000, leg. Gurko.

**Morocco:** 1 ♀, 40 km S Guercif, 15.-17.V.1995, leg. Halada.

**Syria:** 3 ♀♀, Hamah/Masyal env., 9.VI.2000, leg. Deneš; 3 ♀♀, 3 ♂♂, Larakia/Salahidin env., 10.VI.2000, leg. Deneš; 1 ♀, Kafr, Sumayda, 21.VI.2000, leg. Halada.

**Tunisia:** 7 ♀♀, Ksar Hadada, 4.-5.IV.1998, leg. Deneš; 2 ♀♀, Chenini, 4.IV.1999, leg. Deneš; 1 ♀, Kasserine, Fousana, 4.IV.2001, leg. Snizek.

**Turkey:** 2 ♀♀, Halfeti env., 3.-5.V.1994, leg. Deneš; 2 ♀♀, 4 ♂♂, 15 km E Malatya, 27.VI.2000, leg. Halada; 1 ♀, 25 km E Malatya Kopeksiz, 8.VII.1997, leg. Halada; 1 ♀, 10 km N Gercus, 5.VI.1998, leg. Halada; 1 ♂, Karadut env., 50 km NE Adiyaman, 1.VI.2001, leg. Deneš; 1 ♂, 40 km NE Muradive, 2200m, 5.VII.2000, leg. Halada.

***Ammoplanus monticola* GUSSAKOVSKIJ 1952**

**Turkey east:** 1 ♂, 50 km S Kars Pasli, 1.VII.1997 leg. Halada.

This male differs from the redescription of BOUCEK (2001: 902) by the following details: lower ends of the eyes do not extend towards toruli. Clypeal emargination not as broad as distance between outer sides of toruli, on outer side delimited by distinct (submedian) teeth. Fifth sternite distally in the middle with long triangular projection. Pterostigma unicolorous brown.

***Ammoplanus nanus* BOUCEK & GAYUBO 2001**

M o r o c c o : 1 ♀, Tazzeka N.P. Bab-Bou-Idir, V.1999, leg. Prudek.

***Ammoplanus perrisi* GIRAUD 1869 (13 ♀, 3 ♂)**

(= *Ammoplanus wesmaeli* GIRAUD 1869)

A u s t r i a : 1 ♀, Linz env., 1.VII.1950, leg. Hamann.

B u l g a r i a : 2 ♀, 1 ♂, Sandanski env., VI.1968, leg. Kocourek.

G r e e c e : 1 ♀, Épirus, Ioannina NE Skamneli, 1500-1700m, 35°55'N, 20°53'E, 28.VII.1990, leg. Rausch.

I t a l y : 1 ♀, Basilicata 25 km W Lauria, 4.-5.VIII.1999, leg. Haladda.

M o r o c c o : 2 ♀, 50 km W Meknes, 19.V.1997, leg. Halada; 1 ♂, 30 km E Taroudant, 27.IV.1995, leg. Halada; 1 ♂, 15 km S Assa, 17.-18.4.1995, leg. Halada; 1 ♂, 10 km E Guelmin, 5.V.1995, leg. Halada.

S l o v a k i a : 3 ♀, Cachtice-hrad, 28.VI.1968, leg. Strejcek.

T u n i s i a : 1 ♀, 20 km E Tabarka, 17.IV.2001, leg. Halada; 1 ♀, Ksar Hadada, 4.-5.IV.1968, leg. Deneš.

T u r k e y : 1 ♀, vil Eskisheir Sakri ilica near Gumele, VII.1997, leg. Riha.

***Ammoplanus rhodesianus* ARNOLD 1924 (5 ♀, 1 ♂)**

K e n y a m e r : 2 ♀, 1 ♂, Voi (Tsavo), 23.III.-4.IV.1997, leg. Halada; 1 ♀, Voi (Tsavo), 11.-14.IV.1997, leg. Halada.

R e p u b l i c o f S o u t h A f r i c a : 1 ♀, Eastern Cape, 7 km S Cradock, 25.I.2000, leg. Halada; 1 ♀, 50 km SW Springbok, wadi Buffels, 18.X.1999, leg. Halada.

***Ammoplanus simplex* GUSSAKOVSKIJ 1952**

S y r i a : 2 ♀, Kafr Suwayda, 21.VI.2000, leg. Halada.

***Ammoplanus transcaspicus* GUSSAKOVSKIJ 1931**

T a d j i k i s t a n : 1 ♀, W-Pamir Mts., 30 km N Rushan, 3500m, VII.2000, leg. Gurko.

***Ammoplanus* sp.**

The following specimens of *Ammoplanus* could not be named:

M o r o c c o : 1 ♂, 50 km W Meknes, 19.V.1997, leg. Halada.

S y r i a m e r : 2 ♀, Ganawat, 16.V.1995, leg. Deneš. These two females are similar to *Ammoplanus kaszabi* Tsuneki but pronotal collar is rounded and not carinate.

R e p u b l i c o f S o u t h A f r i c a : 1 ♂, Northern Cape, 50 km W Loriesfontein, 14.X.1999, leg. Halada.

T h a i l a n d : 2 ♀, 1 ♂, Mae Hong Son prov., Soppong, 1500m, 19°27'N, 98°20'E, 15.-17.XI.1996, leg. Becvar; 2 ♀, 1 ♂, Mae Hong Son prov., Soppong, 1500m, 19°27'N, 98°20'E, 7.-12.V.1996, leg. Becvar; 1 ♀, Mae Hong Son prov., pass near Soppong, 1500m, 19°27'N, 98°20'E, 7.-10.V.1997, leg. Becvar.

***Protostigmus* TURNER 1918**

(= *Anomiapteryx* GUSSAKOVSKIJ 1935)

(= *Ammoplanopterus* MOCHI 1940)

Only four species have been known until now: *P. championi* TURNER 1918, ♂ from Tunisia; *P. gedeminus* MARSHAKOV 1979, ♀ from Mongolia; *P. sinaiticus* (MOCHI 1940) (*Ammoplanopterus*), ♂ from Sinai; and *P. paradoxa* (GUSSAKOVSKIJ 1935) (*Anomiapteryx*), ♂ from Uzbekistan.

***Protostigmus* sp.**

T u r k e y : 2 ♀♀, Kahraman Maras 40 km SE, 10.VI.1998, leg. Halada.

The two females are not identical with *Protostigmus gedeminus*, but may be the unknown females of one of the other species.

Subtribe: **S t i g m i n a** R. BOHART & MENKE 1976

***Araucastigmus* FINNAMORE 1995*****Araucastigmus masneri* FINNAMORE 1995**

A r g e n t i n i a : 1 ♀, Pucara/San Martin de Los Andes, VI. 1952, leg. Schajovskoj.

***Carinostigmus* TSUNEKI 1954*****Carinostigmus congruus* (WALKER 1860) (135 ♀♀, 35 ♂♂)**

L a o s : 4 ♀♀, Ban Itou env., 10.-18.IV.1999, leg. Sausa; 7 ♀♀, Ban Houaykong, 18.-30.IV.1999, leg. Sausa; 1 ♀, Pakse env., 18.-30.IV.1999, leg. Spevar; 1 ♀, Khammouan prov., Ban Khoun Ngeun, 18°07'N 104°29'E, 250m, XI.2000, leg. Jendek; 4 ♀♀, Louangnamtha pr., 21°09'N 101°19'E, Namtha Muang Sing, 5.-31.V.1997, 900-1200m, leg. Kuban.

J a v a - E : 1 ♀, Tankub anprahu, leg. Hamann.

I n d i a - S : 5 ♀♀, Tamil Nadu, Nilgiri Hills mts., 11°23'N 76°52'E, XI.1993, leg. Boukal.

M a l a y s i a : 2 ♀♀, Perak, Gerik env., 26.-28.II.2000, leg. Deneš; 4 ♀♀, Perak, Bukit Berapit, 21.-22.II.2000, leg. Deneš; 1 ♀, Perak, Bukit Larut, 23.-25.II.2000, leg. Deneš; 4 ♀♀, Perak, 40 km SE Ipoh, 4°25'N 102°23'E, Cameron Highlands, Ringlet, 900m, 25.IV.-5.V.2001, leg. Riha; 3 ♀♀, Ipoh, 5 km E Tanjong Rambutan, 3.-15.IV.2000, leg. Suizek; 3 ♀♀, Benom Mts., 15 km E Kampong Dong, 700m, 3.53°N 102.01°E, 1.IV.1998, leg. Hauck; 3 ♀♀, Pahang, Barian Benom Mt.K. Ulu Dana, IV.1997, leg. Hauck; 1 ♀, Tioman, rd. Kampong Telek-K. Juaka, 4.-16.III.1998, 2.48°N 104.11°E, 0-100m, leg. Hauck; 1 ♀, Perak, Maxwell hill, 900-1000m, above Taiping city, 12.-16.I.1995, leg. Becvar; 1 ♂, Pahang, Cameron Highlands, Tana Rata, 1600m, II.2000, leg. Pacholatko; 6 ♀♀, Pahang, 30 km NE Raub, 300m, Lata Lembik, 3°56'N 101°38'E, IV.-V.2002, leg. Jendek & Sausa.

S r i L a n k a - m e r . c e n t r . : 3 ♀♀, Ratnapura district, 2 km S Hayes, 29.-30.XI.1995, leg. Becvar & Kostal; 3 ♀♀, Matara district, 3 km NW Kotapola, 4.-8.XII.1995, leg. Becvar.

S u m a t r a : 1 ♀, Lampung, 5 km SW Uwa, 600m, 5°04'S 104°04'E, 17.II.2000, leg. Hauck; 3 ♀♀, Benkulu prov., N Curup, Bukit Kaba Mts., 3°29'S 102°36'E, 1000-1500m, 30.I.-3.II.2000, leg. Hauck; 1 ♂, Lampung, 5 km SW Liwa, 600m, 5°04'S 104°04'E, 17.II.2000, leg. Hauck.

T h a i l a n d : 13 ♀♀, 2 ♂♂, Loei prov., Phu Kradung N.P., 1300m, 16°53'N 101°47'E, 11.-15.V.1999, leg. Riha; 3 ♀♀, 1 ♂, Loei prov., Phu Kradung N.P., 1000m, 16°52'N 101°49'E, 16.-17.V.1999, leg. Hauck; 5 ♀♀, Loei prov., Phu Rua N.P., 1100m, 17°30' 101°21'E, 6.-9.IV.1999, leg. Hauck; 13 ♀♀, 5 ♂♂, Nan prov., Bo Klua, 700m, 19°08'N 101°10'E, 28.IV.-1.V.1999, leg. Riha; 3 ♀♀, Nan prov., Bo Klua, 700m, 19°08'N 101°10'E, 22.-26.IV.1999, leg. Hauck; 9 ♀♀, 16 ♂♂, Nan prov., Doi Phu Kha N.P. Haedqu., 19°13'N 101°07'E, 22.-26.IV. 1999, leg. Riha; 5 ♀♀, 4 ♂♂, Mae Hong Son prov., Soppong env., 600m, 28.V.-2.VI.1999, leg. Riha; 2 ♀♀, 2 ♂♂, Mae Hong Son prov., SE Soppong, 1500m, 19°27'N 98°20'E, 23.-27.V.1999, leg. Riha; 4 ♀♀, Chumphon prov., Pha To env., 1.-11.V.1998, leg. Prudek & Sigut; 8 ♀♀, Mae Hong Son prov., Soppong 1500m, 19°27'N 98°20'E, 7.-12.V.1996, leg. Becvar; 1 ♀, Chiang Dag, 1000m, 19°25'N 98°52'E, 17.-24.V.1991, leg. Kuban; 3 ♀♀, Lansang n.g., 500m, 16°48'N 98°57'E, 18.-24.IV.1991, leg. Kuban; 2 ♀♀, Nakhon Si Thammarat prov., Khao Lusang N.P., Krung Ching waterfall, 13.-22.V.1998, leg. Prudek & Sigut; 1 ♀, 2 ♂♂, Chiang Mai prov., San Pakia vill., 19°19'N 98°50'E, 1400m, 1.-15.V.1998, leg. Kuban; 1 ♀, Chiang Dao, 19.-21.V.1997, leg. Snizek; 1 ♀, 1 ♂, Mae Hong Son Prov., Soppong, 1500m, 19°27' N 98°20' E, 15.-17. XI. 1996, leg. Becvar.

***Carinostigmus costatus* KROMBEIN 1984 (24 ♀♀, 4 ♂♂)**

**L a o s** - S : 3 ♀♀, Ban Itou env., 10.-18.IV.1999, leg. Sausa.

**M a l a y s i a** : 2 ♀♀, 1 ♂, Bukit Larut, 23.-25.II.2000, leg. Deneš; 1 ♀, Pahang, Tanah Rata env., 17.-20.II.2000, leg. Deneš; 1 ♀, Perak, Bukit Berapit, 21.-22.II.2000, leg. Deneš; 2 ♀♀, Pahang, Bukit Fraser, 29.II.-6.III.2000, leg. Deneš; 1 ♀, Ipoh, 5 km E Tanjong, Rambutan, 3.-15.IV.2000, leg. Snizek; 1 ♀, Pahang, Baniaran Benom Mts., Kamoong Damak, 12.-15.IV.1997, leg. Hauck; 1 ♀, Perak, 40 km SE Ipoh, Cameron Highlands, Ringlet, 900m, 4°25'N 10°23'E, 25.IV.-5.V.2001, leg. Riha; 1 ♀, Kefanton, Cameron Highlands, 15 km NE Kampona Raia, 9.-11.IV.1997, leg. Hauck.

**S u m a t r a** -S: 1 ♀, Lampung prov., Bukit Barisan, Selatan N.P., 5°04'S 104°04'E, 5 km SW Liwa, 600m, 7.-17.II.2000, leg. Bezdek.

**T h a i l a n d** : 2 ♀♀, 1 ♂, Nan prov., Bo Khua, 700m, 19°08'N 101°10'E, 28.IV.-1.V.1999, leg. Riha; 3 ♀♀, Mae Hong Son prov., Soppong env., 600m, 28.V.-2.VI.1999, leg. Riha; 1 ♀, Chiang Mai prov., San Pakia vill., V.1996, leg. Kuban; 1 ♀, Chiang Dao env., 21.V.-4.VI.1995, leg. Snizek; 1 ♀, Loei prov., Phu Rua N.P., 1100m, 17°30'N 101°21'E, 6.-9.IV.1999, leg. Hauck; 2 ♀♀, Pahang, 30 km NE Raub, 300m, Lata Lembik, 3°58'N 101°38'E, IV.-V.2002, leg. Jendek & Sausa; 1 ♂, Mae Hong Son prov., Soppong, 1500m, 19°27'N 98°20'E, 7.-12.V.1996, leg. Becvar; 1 ♂, Mae Hong Son prov., SE Soppong, 1500m, 19°27'N 98°20'E, 23.-27.V.1999, leg. Riha.

***Carinostigmus filippovi* (GUSSAKOVSKIJ 1934)**

**C h i n a** : 2 ♀♀, Sichuan pr., Emei mt., 1000m, 4.-20.V.1989, leg. Kuban.

***Carinostigmus gueinzii* (TURNER 1912)**

**K e n y a** -SE: 1 ♀, Taita Hills, Wundanyi, 18.-22.III.1997, leg. Halada.

***Carinostigmus johannis* (ARNOLD 1927) (5 ♀♀)**

**B e n i n** ( **A f r i c a** - S E ) : 1 ♀, Zangnanado, riv. Ouene, 15.IV.2000, leg. Halada.

**K e n y a** -SE: 4 ♀♀, Taita Hills, Wundanyi, 18.-22.III.1997, leg. Halada.

***Carinostigmus levifrons* (ARNOLD 1947) (56 ♀♀, 58 ♂♂)**

**B e n i n** ( **A f r i c a** - S E ) : 2 ♀♀, 15 km SE Save, 8.-25.IV.2000, leg. Halada.

**K e n y a** -S: 1 ♀, Voi (Tsavo), 23.III.-4.IV.1997, leg. Halada; 2 ♀♀, Voi (Tsavo) env., 8.-18.XI.1996, leg. Halada.

**N a m i b i a** : 10 ♀♀, 4 ♂♂, Rundu, 18.I.1993, leg. J. Gusenleitner.

**R e p u b l i c o f S o u t h A f r i c a** : 41 ♀♀, 54 ♂♂, Kw. Natal S, 17 km SE Richmond, 3.II.2000, leg. Halada.

***Carinostigmus maior* (MAIDL 1925) (121 ♀♀, 27 ♂♂)**

**B o r n e o** : 1 ♀, Sabah W, 50 km S Tomani, 4.V.1999, leg. Snizek; 2 ♀♀, 1 ♂, Sabah W, Crocker Range E, W of Apin Apin, V.1999, leg. Snizek; 3 ♀♀, Sabah W, Crocker Range E, W of Apin Apin, II.2000, leg. Snizek; 1 ♂, Sabah W, route Ranau-Tambunan, II.2000, leg. Snizek.

**L a o s** - S : 2 ♀♀, Ban Houaykong, 18.-30.IV.1999, leg. Sausa; 4 ♀♀, Ban Itou env., 10.-18.IV.1999, leg. Sausa.

**M a l a y s i a** : 10 ♀♀, 1 ♂, Perak, Bukit Berapit, 21.-22.II.2000, leg. Deneš; 17 ♀♀, 3 ♂♂, Perak, Bukit Larut, 23.-25.II.2000, leg. Deneš; 21 ♀♀, 3 ♂♂, Perak, Gerik env., 26.-28.II.2000, leg. Deneš; 3 ♀♀, Pahang, Bukit Fraser, 29.II.-6.III.2000, leg. Deneš; 2 ♀♀, 2 ♂♂, Pahang, Tanah Rata env., 17.-20.II.2000, leg. Deneš; 22 ♀♀, 2 ♂♂, Ipoh, 5 km E Tanjong Rambutan, 3.-15.IV.2000, leg. Snizek; 8 ♀♀, 8 ♂♂, Perak, 40 km SE Ipoh, 900m, 4°25'N 101°23'E, Cameron Highlands, Ringlet, 25.IV.-5.V.2001, leg. Riha; 1 ♀, Kelantan, Cameron Highlands, 15 km NE Kamoona Raia, 9.-11.IV.1997, leg. Hauck; 1 ♀, Perak prov., Tanjong Rambutan, ca. 20 km NE Ipoh, 6.-12.III.1998, leg. Just; 1 ♀, 1 ♂, Benom Mts., 15 km E Kampong Dong, 700m, 3.53°N 102.01°E, 1.IV.1998, leg. Hauck; 14 ♀♀, Pahang, 30 km NE Raub, Lata Lembik, 300m, 3°53'N 101°38'E,

IV.-V.2002, leg. Jendek & Sausa; 1♂, Pahang, Banjaran Bnom Mts., 20 km S Kampong Ulu Dong, 1500-1900m, 17.-23.IV.1997, leg. Cechovsky; 1♂, Pahang, 30 km NE Raub, Lata Lembik, 300m, 3°56'N 101°38'E, IV.-V.2002, leg. Jendek & Sausa.  
**S u m a t r a**: 1♀, Riau prov., Bukit Tigapuluh N.P., 0°50'S 101°26'E, 18.-25.I.2000, leg. Hauck; 1♀, Lampung, 5 km SW Liwa, 600m, 5°04'S 104°04'E, 17.II.2000, leg. Hauck.  
**T h a i l a n d**: 5♀, 3♂, Nan prov., Bo Klua, 700m, 19°08'N 101°10'E, 28.IV.-1.V.1999, leg. Riha; 1♀, Nan prov., Bo Klua, 700m, 19°08'N 101°10'E, 22.-26.IV.1999, leg. Hauck; 1♀, Loei prov., Phu Kradung N.P., 1300m, 16°53'N 101°47'E, 11.-15.V.1999, leg. Riha.

***Carinostigmus ugandicus* LECLERCQ 1959**

**U g a n d a** - **C W**: 2♀, 2♂, Kasese, Kilembe E Ruwenzori, 23.XI.2001, leg. Snizek.

***Carinostigmus* sp.**

**B o r n e o** (14♀, 4♂), **Laos** (3♀, 2♂), **Malaysia** (2♀, 3♂), **Sumatra** (5♂).  
**T h a i l a n d** (7♀, 9♂).

These specimens could not be named. They will be determined after A.T. Finnamore has finished his revision of the genus *Carinostigmus* and a useful key exists.

***Incastigmus* FINNAMORE 1995**

***Incastigmus trichodocerus* FINNAMORE 2002**

**E c u a d o r**: 1♀, 80 km NW Quito, Pacto, 1300m, 26.II.-2.III.2002, leg. Halada.

***Llaqhastigmus* FINNAMORE 1995**

***Llaqhastigmus chutiyana* FINNAMORE 1995**

**E c u a d o r**: 1♀, 1♂, Tungurahua prov., Banos, 1500m, 14.II.2002, leg. Halada.

***Llaqhastigmus colombianus* FINNAMORE 1995**

**E c u a d o r**: 1♂, Napo prov., 70 km SW Coca, Loreto, 300m, 4.-10.III.2002, leg. Halada.

***Stigmus* PANZER 1804**

***Stigmus pendulus* PANZER 1804**

**C z e c h R e p u b l i c**: 5♂.

***Stigmus solskyi* A. MORAWITZ 1864**

**K a z a k h s t a n**: 1♂, Ili Mts., Tsheraja Retshka, 30.IV.2000, leg. Gurko.  
**C z e c h R e p u b l i c**: 3♂.

***Stigmus* sp.**

**Argentina** (1♀), **Borneo** (6♀), **China** (1♀), **Ecuador** (3♀, 2♂), **India** (1♀), **Laos** (3♀), **Mexiko** (1♀, 1♂), **Thailand** (3♀, 10♂).

These specimens could not be named. They will be determined after A.T. Finnamore has finished his revision of the genus *Stigmus* and a useful key exists.



***Tzustigmus* FINNAMORE 1995**

***Tzustigmus rhinocerus* (BUDRYS 1987)**

Russian Federation: 1♀, Primorskiyi, 40 km E Ussuriysk, 11.VI.1993, leg. Sidorenko.

***Tzustigmus khmer* FINNAMORE 1995 (2♂♂)**

Thailand: 1♂, Mae Hong Son prov., Soppong, 1500m, 19°27'N 98°20'E, 15.-17.XI.1996, leg. Becvar; 1♂, Mae Hong Son prov., Soppong, 1500m, 19°27'N 98°20'E, 7.-12.V.1996, leg. Becvar.

The dorsal surface of the petiolus of these males is nearly unsculptured. This species is extremely close to, if not identical with, *Tzustigmus wuming* FINNAMORE 1995, from Taiwan.

***Tzustigmus syam* FINNAMORE 1995 (3♀♀)**

Thailand: 1♀, Mae Hong Son prov., Soppong, 1500m, 19°27'N 98°20'E, 7.-12.V.1996, leg. Becvar; 1♀, Mae Hong Son prov., Soppong, 1500m, 19°27'N 98°20'E, 15.-17.XI.1996, leg. Becvar; 1♀, Nan prov., Do Phu Kha N.P. Headq., 19°13'N 101°07'E, 22.-26.IV.1999, leg. Riha.

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### References

- BOUCEK Z. (2001): Palaearctic species of *Ammoplanus* (Hymenoptera: Sphecidae). — Journal of Natural History 2001 35: 849-929.
- DOLLFUSS H. (2001): The Sphecids Wasps of the Genus *Pemphredon* LATREILLE 1756, of "Biologiezentrum Linz" Collection in Linz, Austria (Hymenoptera, Sphecidae). — Linzer biol. Beitr. 33/1: 269-273.
- SCHMID-EGGER C. (2002): About taxonomy of *Psenulus fulvicornis* SCHENCK (Hymenoptera, "Sphecidae"). — Bembix 15: 13-18.

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